

[EPUB] Red Hat Open Shift Enterprise Administration

Yeah, reviewing a book **red hat open shift enterprise administration** could build up your close links listings. This is just one of the solutions for you to be successful. As understood, completion does not suggest that you have astonishing points.

Comprehending as capably as harmony even more than extra will pay for each success. next-door to, the revelation as competently as perception of this red hat open shift enterprise administration can be taken as without difficulty as picked to act.

OpenShift Security Guide-Gabriel Alford, 1st 2020-05

OpenShift for Developers-Grant Shipley 2016-08-04 Keen to build web applications for the cloud? Get a quick hands-on introduction to OpenShift, the open source Platform as a Service (PaaS) offering from Red Hat. With this practical guide, you'll learn the steps necessary to build, deploy, and host a complete real-world application on OpenShift without having to slog through long, detailed explanations of the technologies involved. OpenShift enables you to use Docker application containers and the Kubernetes cluster manager to automate the way you create, ship, and run applications. Through the course of the book, you'll learn how to use OpenShift and the Wildfly application server to build and then immediately deploy a Java application online. Learn about OpenShift's core technology, including Docker-based containers and Kubernetes Use a virtual machine with OpenShift installed and configured on your local environment Create and deploy your first application on the OpenShift platform Add language runtime dependencies and connect to a database Trigger an automatic rebuild and redeployment when you push changes to the repository Get a working environment up in minutes with application templates Use commands to check and debug your application Create and build Docker-based images for your application

Kubernetes Operators-Jason Dobies 2020-02-21 Operators are a way of packaging, deploying, and managing Kubernetes applications. A Kubernetes application doesn't just run on Kubernetes; it's composed and managed in Kubernetes terms. Operators add application-specific operational knowledge to a Kubernetes cluster, making it easier to automate complex, stateful applications and to augment the platform. Operators can coordinate application upgrades seamlessly, react to failures automatically, and streamline repetitive maintenance like backups. Think of Operators as site reliability engineers in software. They work by extending the Kubernetes control plane and API, helping systems integrators, cluster administrators, and application developers reliably deploy and manage key services and components. Using real-world examples, authors Jason Dobies and Joshua Wood demonstrate how to use Operators today and how to create Operators for your applications with the Operator Framework and SDK. Learn how to establish a Kubernetes cluster and deploy an Operator Examine a range of Operators from usage to implementation Explore the three pillars of the Operator Framework: the Operator SDK, the Operator Lifecycle Manager, and Operator Metering Build Operators from the ground up using the Operator SDK Build, package, and run an Operator in development, testing, and production phases Learn how to distribute your Operator for installation on Kubernetes clusters

Knative Cookbook-Burr Sutter 2020-04-09 Enterprise developers face several challenges when it comes to building serverless applications, such as integrating applications and building container images from source. With more than 60 practical recipes, this cookbook helps you solve these issues with Knative—the first serverless platform natively designed for Kubernetes. Each recipe contains detailed examples and exercises, along with a discussion of how and why it works. If you have a good understanding of serverless computing and Kubernetes core resources such as deployment, services, routes, and replicas, the recipes in this cookbook show you how to apply Knative in real enterprise application development. Authors Kamesh Sampath and Burr Sutter include chapters on autoscaling, build and eventing, observability, Knative on OpenShift, and more. With this cookbook, you'll learn how to: Efficiently build, deploy, and manage modern serverless workloads Apply Knative in real enterprise scenarios, including advanced eventing Monitor your Knative serverless applications effectively Integrate Knative with CI/CD principles, such as using pipelines for faster, more successful production deployments Deploy a rich ecosystem of enterprise integration patterns and connectors in Apache Camel K as Kubernetes and Knative components

Container Security-Liz Rice 2020-04-06 To facilitate scalability and resilience, many organizations now run applications in cloud native environments using containers and orchestration. But how do you know if the deployment is secure? This practical book examines key underlying technologies to help developers, operators, and security professionals assess security risks and determine appropriate solutions. Author Liz Rice, VP of open source engineering at Aqua Security, looks at how the building blocks commonly used in container-based systems are constructed in Linux. You'll understand what's happening when you deploy containers and learn how to assess potential security risks that could affect your deployments. If you run container applications with kubectl or docker and use Linux command-line tools such as ps and grep, you're ready to get started. Explore attack vectors that affect container deployments Dive into the Linux constructs that underpin containers Examine measures for hardening containers Understand how misconfigurations can compromise container isolation Learn best practices for building container images Identify container images that have known software vulnerabilities Leverage secure connections between containers Use security tooling to prevent attacks on your deployment

DevOps with OpenShift-Stefano Picozzi 2017-07-10 For many organizations, a big part of DevOps' appeal is software automation using infrastructure-as-code techniques. This book presents developers, architects, and infra-ops engineers with a more practical option. You'll learn how a container-centric approach from OpenShift, Red Hat's cloud-based PaaS, can help your team deliver quality software through a self-service view of IT infrastructure. Three OpenShift experts at Red Hat explain how to configure Docker application containers and the Kubernetes cluster manager with OpenShift's developer- and operational-centric tools. Discover how this infrastructure-agnostic container management platform can help companies navigate the murky area where infrastructure-as-code ends and application automation begins. Get an application-centric view of automation—and understand why it's important Learn patterns and practical examples for managing continuous deployments such as rolling, A/B, blue-green, and canary Implement continuous integration pipelines with OpenShift's Jenkins capability Explore mechanisms for separating and managing configuration from static runtime software Learn how to use and customize OpenShift's source-to-image capability Delve into management and operational considerations when working with OpenShift-based application workloads Install a self-contained local version of the OpenShift environment on your computer

Deploying to OpenShift-Graham Dumpleton 2018-05-02 Get an in-depth tour of OpenShift, the container-based software deployment and management platform from Red Hat that provides a secure multi-tenant environment for the enterprise. This practical guide describes in detail how OpenShift, building on Kubernetes, enables you to automate the way you create, ship, and run applications in a containerized environment. Author Graham Dumpleton provides the knowledge you need to make the best use of the OpenShift container platform to deploy not only your cloud-native applications, but also more traditional stateful applications. Developers and administrators will learn how to run, access, and manage containers in OpenShift, including how to orchestrate them at scale. Build application container images from source and deploy them Implement and extend application image builders Use incremental and chained builds to accelerate build times Automate builds by using a webhook to link OpenShift to a Git repository Add configuration and secrets to the container as project resources Make an application visible outside the OpenShift cluster Manage persistent storage inside an OpenShift container Monitor application health and manage the application lifecycle This book is a perfect follow-up to OpenShift for Developers: A Guide for Impatient Beginners (O'Reilly).

OpenShift in Action-Jamie Duncan 2018 Summary OpenShift in Action is a full reference to Red Hat OpenShift that breaks down this robust container platform so you can use it day-to-day. Combining Docker and Kubernetes, OpenShift is a powerful platform for cluster management, scaling, and upgrading your enterprise apps. It doesn't matter why you use OpenShift--by the end of this book you'll be able to handle every aspect of it, inside and out! Foreword by Jim Whitehurst, Red Hat. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Containers let you package everything into one neat place, and with Red Hat OpenShift you can build, deploy, and run those packages all in one place! Combining Docker and Kubernetes, OpenShift is a powerful platform for cluster management, scaling, and upgrading your enterprise apps. About the Book OpenShift in Action is a full reference to Red Hat OpenShift that breaks down this robust container platform so you can use it day-to-day. Starting with how to deploy and run your first application, you'll go deep into OpenShift. You'll discover crystal-clear explanations of namespaces, cgroups, and SELinux, learn to prepare a cluster, and even tackle advanced details like software-defined networks and security, with real-world examples you can take to your own work. It doesn't matter why you use OpenShift--by the end of this book you'll be able to handle every aspect of it, inside and out! What's Inside Written by lead OpenShift architects Rock-solid fundamentals of Docker and Kubernetes Keep mission-critical applications up and running Manage persistent storage About the Reader For DevOps engineers and administrators working in a Linux-based distributed environment. About the Authors Jamie Duncan is a cloud solutions architect for Red Hat, focusing on large-scale OpenShift deployments. John Osborne is a principal OpenShift architect for Red Hat. Table of Contents PART 1 - FUNDAMENTALS Getting to know OpenShift Getting started Containers are Linux PART 2 - CLOUD-NATIVE APPLICATIONS Working with services

Autoscaling with metrics Continuous integration and continuous deployment PART 3 - STATEFUL APPLICATIONS Creating and managing persistent storage Stateful applications PART 4 - OPERATIONS AND SECURITY Authentication and resource access Networking Security

Deployment and Usage Guide for Running AI Workloads on Red Hat OpenShift and NVIDIA DGX Systems with IBM Spectrum Scale-Simon Lorenz 2020-11-30 This IBM® Redpaper publication describes the architecture, installation procedure, and results for running a typical training application that works on an automotive data set in an orchestrated and secured environment that provides horizontal scalability of GPU resources across physical node boundaries for deep neural network (DNN) workloads. This paper is mostly relevant for systems engineers, system administrators, or system architects that are responsible for data center infrastructure management and typical day-to-day operations such as system monitoring, operational control, asset management, and security audits. This paper also describes IBM Spectrum® LSF® as a workload manager and IBM Spectrum Discover as a metadata search engine to find the right data for an inference job and automate the data science workflow. With the help of this solution, the data location, which may be on different storage systems, and time of availability for the AI job can be fully abstracted, which provides valuable information for data scientists.

IBM Storage for Red Hat OpenShift Container Platform V3.11 Blueprint Version 1 Release 1-IBM 2019-09-29 IBM Storage for Red Hat OpenShift Container Platform is a comprehensive container-ready solution that includes all the hardware & software components necessary to setup and/or expand your Red Hat OpenShift Container Platform V3.11 environment. IBM Storage, bringing enterprise data services to containers. In this blueprint, learn how to: • Combine the benefits of IBM Systems with the performance of IBM Storage solutions so that you can deliver the right services to your clients today! • Build a 24 by 7 by 365 enterprise class private cloud with Red Hat OpenShift Container Platform • Leverage enterprise class services such as NVMe based flash performance, high data availability, and advanced container security IBM Storage for Red Hat OpenShift Container Platform: designed for your DevOps environment for on-premises deployment with easy-to-consume components built to perform and scale for your enterprise. Simplify your journey to cloud with pre-tested and validated blueprints engineered to enable rapid deployment and peace of mind as you move to a hybrid multicloud environment. You now have the capabilities. Getting Started with OpenShift-Steve Pousty 2014-05-14 Intrigued by the possibilities of developing web applications in the cloud? With this concise book, you get a quick hands-on introduction to OpenShift, the open source Platform as a Service (PaaS) offering from Red Hat. You'll learn the steps necessary to build, deploy, and host a complete real-world application on OpenShift, without having to read long, detailed explanations of the technologies involved. Though the book uses Python, application examples in other languages are available on GitHub. If you can build web applications, use a command line, and program in Java, Python, Ruby, Node.js, PHP, or Perl, you're ready to get started. Dive in and create your first example application with OpenShift Modify the example with your own code and hot-deploy the changes Add components such as a database, task scheduling, and monitoring Use external libraries and dependencies in your application Delve into networking, persistent storage, and backup options Explore ways to adapt your team processes to use OpenShift Learn OpenShift terms, technologies, and commands Get a list of resources to learn more about OpenShift and PaaS

Red Hat RHCSA 8 Cert Guide-Sander van Vugt 2019-11-04 This is the eBook version of the print title. Learn, prepare, and practice for Red Hat RHCSA 8 (EX200) exam success with this Cert Guide from Pearson IT Certification, a leader in IT Certification learning. Master Red Hat RHCSA 8 EX200 exam topics Assess your knowledge with chapter-ending quizzes Review key concepts with exam-preparation tasks Practice with four unique practice tests Learn from two full hours of video training from the author's Red Hat Certified System Administrator (RHCSA) Complete Video Course, 3rd Edition. Red Hat RHCSA 8 Cert Guide is a best-of-breed exam study guide. Leading Linux consultant, author, and instructor Sander van Vugt shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The book presents you with an organized test-preparation routine through the use of proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Review questions help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan. Well regarded for its level of detail, assessment features, and challenging review questions and exercises, this study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time, including Basic system management: Installation, tools, file management, text files, RHEL8 connections, user/group management, permissions, and network configuration Operating running systems: Managing software, processes, storage, and advanced storage; working with systemd; scheduling tasks; and configuring logging Advanced system administration: Managing the kernel and boot procedures, essential troubleshooting, bash shell scripting Managing network services: Configuring SSH, firewalls, and time services; managing Apache HTTP services and SE Linux; and accessing network storage

Red Hat OpenShift Fundamentals, 3/e-Sander van Vugt 2019 3+ Hours of Video Instruction In more than 3 hours of video instruction, Red Hat OpenShift Fundamentals LiveLessons viewers will learn how to administer Red Hat OpenShift to manage containers in an enterprise environment and to integrate them in a DevOps environment. Overview In more than 3 hours of video instruction, Red Hat OpenShift Fundamentals LiveLessons viewers will learn how to administer Red Hat OpenShift to manage containers in an enterprise environment and to integrate them in a DevOps environment. Red Hat OpenShift Fundamentals LiveLessons provides an introduction to working with containers in an OpenShift environment, and covers all core aspects of working with containers in OpenShift. OpenShift is an increasingly popular platform that helps you more easily deploy applications in an enterprise environment. The platform helps developers to seamlessly roll out an application in the form of a completely operational container. At the same time, it allows administrators to manage the application life cycle in a flexible way, where applications can be monitored for availability, and easily scaled up and down if the workload requires it. Learn how to get started with OpenShift in six lessons. In the first lesson, you'll learn how OpenShift can help you. An explanation of what OpenShift is, and how it relates to the Kubernetes platform is provided. The second lesson discusses how to get started with OpenShift, and different installation scenarios are demonstrated. Lesson 3 shows how to deploy applications in OpenShift, and Lesson 4 will explain software-defined networking, as implemented in OpenShift. Lesson 5 discusses more advanced features, such as pod scaling and node placement; and Lesson 6 shows how to connect containers in OpenShift to storage. With a combination of white-board instruction, demonstrations, and CLI learning, Sander van Vugt demystifies OpenShift. Skill Level Beginner/Intermediate Learn How To Understand when and how to use OpenShift depending on your environment Install the various versions of OpenShift Create applications from the web console Creating resources using the oc command line utility Use source-to-image to automatically build containers from the source code Use software-defined networking and using SDN in OpenShift Work with applications, including scaling Handle pod scheduling Manage images, image streams, and OpenShift templates Set up OpenShift storage Who Should Take This Course IT professionals that...

The Open Organization-Jim Whitehurst 2015 This is a story of reinvention. Jim Whitehurst, celebrated president and CEO of one of the world's most revolutionary software companies, tells first-hand his journey from traditional manager (Delta Air Lines, Boston Consulting Group) and "chief" problem solver to CEO of one of the most open organizational environments he'd ever encountered. This challenging transition, and what Whitehurst learned in the interim, has paved the way for a new way of managing—one this modern leader sees as the only way companies will successfully function in the future. Whitehurst says beyond embracing the technology that has so far disrupted entire industries, companies must now adapt their management and organizational design to better fit the Information Age. His mantra? "Adapt or die." Indeed, the successful company Whitehurst leads—the open source giant Red Hat—has become the organizational poster child for how to reboot, redesign, and reinvent an organization for a decentralized, digital age. Based on open source principles of transparency, participation, and collaboration, "open management" challenges conventional business ideas about what companies are, how they run, and how they make money. This book provides the blueprint for putting it into practice in your own firm. He covers challenges that have been missing from the conversation to date, among them: how to scale engagement; how to have healthy debates that net progress; and how to attract and keep the "Social Generation" of workers. Through a mix of vibrant stories, candid lessons, and tested processes, Whitehurst shows how Red Hat has blown the traditional operating model to pieces by emerging out of a pure bottom up culture and learning how to execute it at scale. And he explains what other companies are, and need to be doing to bring this open style into all facets of the organization. By showing how to apply open source methods to everything from structure, management, and strategy to a firm's customer and partner relationships, leaders and teams will now have the tools needed to reach a new level of work. And with that new level of work comes unparalleled success. The Open Organization is your new resource for doing business differently. Get ready to make traditional management thinking obsolete.

Mastering CloudForms Automation-Peter McGowan 2016-08-22 Learn how to work with the Automate feature of CloudForms, the powerful Red Hat cloud management platform that lets you administer your virtual infrastructure, including hybrid public and private clouds. This practical hands-on introduction shows you how to increase your operational efficiency by automating day-to-day tasks that now require manual input. Throughout the book, author Peter McGowan provides a combination of theoretical information and practical coding examples to help you learn the Automate object model. With this CloudForms feature, you can create auto-scalable cloud applications, eliminate manual decisions and operations when provisioning virtual machines and cloud instances, and manage your complete virtual machine lifecycle. In six parts, this book helps you: Learn the objects and concepts for developing automation scripts with CloudForms Automate Customize the steps and workflows involved in provisioning virtual machines Create and use service catalogs, items, dialogs, objects, bundles, and hierarchies Use CloudForm's updated workflow to retire and delete virtual machines and services Orchestrate and coordinate with external

services as part of a workflow Explore distributed automation processing as well as argument passing and handling
JBoss: Developer's Guide-Elvadas Nono Woguia 2017-08-31 Build your own enterprise applications and integration flows with JBoss and its products About This Book Build fast, smart, and flexible applications using JBoss Couple one or more JBoss products to effectively solve various business problems Explore the JBoss product ecosystem for improving the performance of your projects Who This Book Is For If you are a Java developer who wants to have a complete view of the JBoss ecosystem or quickly explore a specific JBoss Product, then this is the book you want. Integrators and consultants, familiar with JBoss, who want integrate several JBoss products within their ongoing project will also find this book useful. What You Will Learn Create new applications or integrate existing systems with JBoss products Setup and manage a JBoss domain Setup and manage a JBoss Fuse cluster with Fabric and Apache Karaf Create and deploy OSGi applications on JBoss Fuse containersv Manage enterprise data with JBoss Datagrid Aggregate various data sources with JBoss Data virtualization to offer data as a service Optimize your business and workflows with both JBoss Business RulesManagement System and JBoss Business Process Management platforms. In Detail Have you often wondered what is the best JBoss product to solve a specific problem? Do you want to get started with a specific JBoss product and know how to integrate different JBoss products in your IT Systems? Then this is the book for you. Through hands-on examples from the business world, this guide presents details on the major products and how you can build your own Enterprise services around the JBoss ecosystem. Starting with an introduction to the JBoss ecosystem, you will gradually move on to developing and deploying clustered application on JBoss Application Server, and setting up high availability using undertow or HA proxy loadbalancers. As you are moving to a micro service architecture, you will be taught how to package existing Java EE applications as micro service using Swarm or create your new micro services from scratch by coupling most popular Java EE frameworks like JPA, CDI with Undertow handlers. Next, you will install and configure JBoss Data grid in development and production environments, develop cache based applications and aggregate various data source in JBoss data virtualization. You will learn to build, deploy, and monitor integration scenarios using JBoss Fuse and run both producers/consumers applications relying on JBoss AMQ. Finally, you will learn to develop and run business workflows and make better decisions in your applications using Drools and Jboss BPM Suite Platform. Style and Approach The book works through the major JBoss products, with examples and instructions to help you understand each product and how they work together.

IBM Storage for Red Hat OpenShift Container Platform V3.11 Blueprint Version 1 Release 1- 2019 IBM Storage for Red Hat OpenShift Container Platform is a comprehensive container-ready solution that includes all the hardware & software components necessary to setup and/or expand your Red Hat OpenShift Container Platform V3.11 environment. IBM Storage, bringing enterprise data services to containers. In this blueprint, learn how to: • Combine the benefits of IBM Systems with the performance of IBM Storage solutions so that you can deliver the right services to your clients today! • Build a 24 by 7 by 365 enterprise class private cloud with Red Hat OpenShift Container Platform • Leverage enterprise class services such as NVMe based flash performance, high data availability, and advanced container security IBM Storage for Red Hat OpenShift Container Platform: designed for your DevOps environment for on-premises deployment with easy-to-consume components built to perform and scale for your enterprise. Simplify your journey to cloud with pre-tested and validated blueprints engineered to enable rapid deployment and peace of mind as you move to a hybrid multicloud environment. You now have the capabilities.

Red Hat OpenShift V4.3 on IBM Power Systems Reference Guide-Dino Quintero 2020-09-10 This IBM® Redpaper publication describes how to deploy Red Hat OpenShift V4.3 on IBM Power Systems servers. This book presents reference architectures for deployment, initial sizing guidelines for server, storage, and IBM Cloud® Paks. Moreover, this publication delivers information about initial supported Power System configurations for Red Hat OpenShift V4.3 deployment (bare metal, IBM PowerVM® LE LPARs, and others). This book serves as a guide for how to deploy Red Hat OpenShift V4.3 and provide start guidelines and recommended practices for implementing it on Power Systems and completing it with the supported IBM Cloud Paks. The publication addresses topics for developers, IT architects, IT specialists, sellers, and anyone who wants to implement a Red Hat OpenShift V4.3 and IBM Cloud Paks on IBM Power Systems. This book also provides technical content to transfer how-to skills to the support teams, and solution guidance to the sales team. This book compliments the documentation that is available at IBM Knowledge Center, and also aligns with the educational offerings that are provided by the IBM Systems Technical Education (SSE).

Kubernetes Patterns-Bilgin Ibryam 2019-04-09 The way developers design, build, and run software has changed significantly with the evolution of microservices and containers. These modern architectures use new primitives that require a different set of practices than most developers, tech leads, and architects are accustomed to. With this focused guide, Bilgin Ibryam and Roland Huß from Red Hat provide common reusable elements, patterns, principles, and practices for designing and implementing cloud-native applications on Kubernetes. Each pattern includes a description of the problem and a proposed solution with Kubernetes specifics. Many patterns are also backed by concrete code examples. This book is ideal for developers already familiar with basic Kubernetes concepts who want to learn common cloud native patterns. You'll learn about the following pattern categories: Foundational patterns cover the core principles and practices for building container-based cloud-native applications. Behavioral patterns explore finer-grained concepts for managing various types of container and platform interactions. Structural patterns help you organize containers within a pod, the atom of the Kubernetes platform. Configuration patterns provide insight into how application configurations can be handled in Kubernetes. Advanced patterns covers more advanced topics such as extending the platform with operators.

Mastering JBoss Enterprise Application Platform 7-Francesco Marchioni 2016-08-31 Create modular scalable enterprise-grade applications with JBoss Enterprise Application Platform 7 About This Book Leverage the power of JBoss EAP 7 along with Java EE 7 to create professional enterprise grade applications. Get you applications cloud ready and make them highly scalable using this advanced guide. Become a pro Java Developer and move ahead of the crowd with this advanced practical guide. Who This Book Is For The ideal target audience for this book is Java System Administrators who already have some experience with JBoss EAP and who now want explore in depth creating Enterprise grade apps with the latest JBoss EAP version. What You Will Learn Configure services using the Command Line Interface Deliver fault tolerant server configurations Harden the application server with advanced techniques Expand the application server's horizon with tools such as like Docker/OpenShift Create enterprise ready configurations using clustering techniques. Deliver advanced security solutions and learn how to troubleshoot common network/performance issues In Detail The JBoss Enterprise Application Platform (EAP) has been one of the most popular tools for Java developers to create modular, cloud-ready, and modern applications. It has achieved a reputation for architectural excellence and technical savvy, making it a solid and efficient environment for delivering your applications. The book will first introduce application server configuration and the management instruments that can be used to control the application server. Next, the focus will shift to enterprise solutions such as clustering, load balancing, and data caching; this will be the core of the book. We will also discuss services provided by the application server, such as database connectivity and logging. We focus on real-world example configurations and how to avoid common mistakes. Finally, we will implement the knowledge gained so far in terms of Docker containers and cloud availability using RedHat's OpenShift. Style and approach If you are a Java developer who wants to level-up to modern day Java web development with the latest Java EE 7 and JBoss EAP 7, this book is the ideal solution for you. It addresses (in a clear and simple way) proof-of-concept scenarios such as clustering and cloud and container configurations, and explains how to solve common issues.

Architecting and Operating OpenShift Clusters-William Caban 2019-09-06 Design and architect resilient OpenShift clusters and gain a keen understanding of how hundreds of projects are integrated into a powerful solution. While there are many OpenShift resources available for developers, this book focuses on the key elements of infrastructure and operations that teams need when looking to integrate and maintain this platform. You'll review important concepts, such as repeatable deployment techniques, advanced OpenShift RBAC capabilities, monitoring clusters, and integrating with external services. You'll also see how to run specialized workloads in OpenShift and how to deploy non-web based applications on the platform, all designed to help cultivate best practices as your organization continue evolve in microservices architectures. OpenShift has become the main enterprise Kubernetes distribution and its market penetration continues to growth at rapid rate. While OpenShift's documentation provides a great list of configuration options to work with the platform, it can be a daunting task to wade through. Architecting and Operating OpenShift Clusters breaks this content down into clear and useful concepts to provide you with a solid understanding of the OpenShift internal architecture. What You'll Learn Operate high availability in muti-tenant OCP clusters Understand OpenShift SDN models, capabilities, and storage classes Integrate OCP with existing data center capabilities and CI/CD pipelines Support advanced capabilities like: Istio, Multus, Kubernetes Operators, hybrid deployments Who This Book Is For Cloud architects, OpenShift cluster administrators, and teams supporting developers in OpenShift environments who have a basic understanding of this platform and microservices architectures.

OpenShift for Developers-Grant Shipley 2016-08-04 Keen to build web applications for the cloud? Get a quick hands-on introduction to OpenShift, the open source Platform as a Service (PaaS) offering from Red Hat. With this practical guide, you'll learn the steps necessary to build, deploy, and host a complete real-world application on OpenShift without having to slog through long, detailed explanations of the technologies involved. OpenShift enables you to use Docker application containers and the Kubernetes cluster manager to automate the way you create, ship, and run applications. Through the course of the book, you'll learn how to use OpenShift and the Wildfly application server to build and then immediately deploy a Java application online. Learn about OpenShift's core technology, including Docker-based containers and Kubernetes Use a virtual machine with OpenShift installed and configured on your local environment Create and deploy your first application on the OpenShift platform Add language runtime dependencies and connect to a database Trigger an automatic rebuild and

redeployment when you push changes to the repository Get a working environment up in minutes with application templates Use commands to check and debug your application Create and build Docker-based images for your application

Red Hat OpenShift on IBM Z Installation Guide-Subhajit Maitra 2020-09-29 This IBM® Redpaper publication provides all the necessary steps to successfully install Red Hat OpenShift 4.4 on IBM Z® or LinuxONE servers. It also provides an introduction to OpenShift nodes, Red Hat Enterprise Linux CoreOS, and Ansible. The steps that are described in this paper are taken from the official pages of the Red Hat website. This IBM Redpaper publication was written for IT architects, IT specialists, and others who are interested in installing Red Hat OpenShift on IBM Z.

Hands-On Enterprise Java Microservices with Eclipse MicroProfile-Cesar Saavedra 2019-08-30 An effective guide to designing, building, and deploying enterprise Java microservices with Eclipse MicroProfile Key Features Create cloud-native microservices with ease using this detailed guide Avoid vendor lock-in when implementing microservices using Eclipse MicroProfile Discover why MicroProfile is a great specification for building microservices in multi-cloud environments Book Description Eclipse MicroProfile has gained momentum in the industry as a multi-vendor, interoperable, community-driven specification. It is a major disruptor that allows organizations with large investments in enterprise Java to move to microservices without spending a lot on retraining their workforce. This book is based on MicroProfile 2.2, however, it will guide you in running your applications in MicroProfile 3.0. You'll start by understanding why microservices are important in the digital economy and how MicroProfile addresses the need for enterprise Java microservices. You'll learn about the subprojects that make up a MicroProfile, its value proposition to organizations and developers, and its processes and governance. As you advance, the book takes you through the capabilities and code examples of MicroProfile's subprojects - Config, Fault Tolerance, Health Check, JWT Propagation, Metrics, and OpenTracing. Finally, you'll be guided in developing a conference application using Eclipse MicroProfile, and explore possible scenarios of what's next in MicroProfile with Jakarta EE. By the end of this book, you'll have gained a clear understanding of Eclipse MicroProfile and its role in enterprise Java microservices. What you will learn Understand why microservices are important in the digital economy Analyze how MicroProfile addresses the need for enterprise Java microservices Test and secure your applications with Eclipse MicroProfile Get to grips with various MicroProfile capabilities such as OpenAPI and Typesafe REST Client Explore reactive programming with MicroProfile Stream and Messaging candidate APIs Discover and implement coding best practices using MicroProfile Who this book is for If you're a Java developer who wants to create enterprise microservices, this book is for you. Familiarity with Java EE and the concept of microservices will help you get the most out of this book.

Software Defined Data Center with Red Hat Cloud and Open Source IT Operations Management-Dino Quintero 2020-11-04 This IBM® Redbooks® publication delivers a Site Reliability Engineering (SRE) solution for cloud workloads that uses Red Hat OpenStack for Infrastructure as a Service (IaaS), Red Hat OpenShift for Platform as a Service (PaaS), and IT operations management that uses open source tools. Today, customers are no longer living in a world of licensed software. Curiosity increased the demand for investigating the Open Source world for Community Open Source and Enterprise grade applications. IBM as one of the contributors to the Open Source community is interested in helping the software be maintained and supported. Having companies, such as IBM, support the evolution of Open Source software helps to keep the Open Source community striving for enterprise grade open source solutions. Lately, companies are working on deciphering how to take advantage of Enterprise and Community Open Source to implement in their enterprises. The business case for open source software is no longer a mystery and no surprise that most of the new positions in IT enterprises are related to open source projects. The ability of a large enterprise to manage this sort of implementations is to engage in a hypertrophied cooperation, where the ability to not only cooperate with teams and people outside your organization, but also to find new ways of working together and devise new ways to improve the software and its code. A goal for this publication is to help the client's journey into the open source space and implement a private Cloud Container-based architecture with the ability to manage the entire IT Service Management processes from the open source framework. This publication describes the architecture and implementation details of the solution. Although not every piece of this solution is documented here, this book does provide instructions for what was achieved incorporating open source technologies. Moreover, with this publication, the team shares their collaboration experiences working in a team of technologists, open source developers, Red Hat, and the open source community. This publication is for designers, developers, managers, and anyone who is considering starting a Cloud open source project, or users who started that journey. This book also can be a manual to guide the implementation of a technical viable architecture and help those enterprises participate in an open source project but have not done so before. The reader must be familiar with principles in programming and basic software engineering concepts, such as source code, compilers, and patches.

IBM FlashSystem 5000 Family Products-Jon Tate 2020-03-03 This IBM® Redbooks® publication provides an introduction and overview of the latest products in the IBM FlashSystem® 5000 Family, including their hardware and software features.

IBM PowerHA SystemMirror V7.2.3 for IBM AIX and V7.22 for Linux-Dino Quintero 2020-04-16 This IBM® Redbooks® publication helps strengthen the position of the IBM PowerHA® SystemMirror® for Linux solution with well-defined and documented deployment models within an IBM Power Systems™ environment, which provides customers a planned foundation for business resilience and disaster recovery (DR) for their IBM Power Systems infrastructure solutions. This book addresses topics to help answer customers' complex high availability (HA) and DR requirements for IBM AIX® and Linux on IBM Power Systems servers to help maximize system availability and resources and provide technical documentation to transfer the how-to-skills to users and support teams. This publication is targeted at technical professionals (consultants, technical support staff, IT architects, and IT specialists) who are responsible for providing HA and DR solutions and support for IBM PowerHA SystemMirror for AIX and Linux Standard and Enterprise Editions on IBM Power Systems servers.

Learn OpenShift-Aleksey Usov 2018-07-30 Gain hands-on experience of installing OpenShift Origin 3.9 in a production configuration and managing applications using the platform you built Key Features Gain hands-on experience of working with Kubernetes and Docker Learn how to deploy and manage applications in OpenShift Get a practical approach to managing applications on a cloud-based platform Explore multi-site and HA architectures of OpenShift for production Book Description Docker containers transform application delivery technologies to make them faster and more reproducible, and to reduce the amount of time wasted on configuration. Managing Docker containers in the multi-node or multi-datacenter environment is a big challenge, which is why container management platforms are required. OpenShift is a new generation of container management platforms built on top of both Docker and Kubernetes. It brings additional functionality to the table, something that is lacking in Kubernetes. This new functionality significantly helps software development teams to bring software development processes to a whole new level. In this book, we'll start by explaining the container architecture, Docker, and CRI-O overviews. Then, we'll look at container orchestration and Kubernetes. We'll cover OpenShift installation, and its basic and advanced components. Moving on, we'll deep dive into concepts such as deploying application OpenShift. You'll learn how to set up an end-to-end delivery pipeline while working with applications in OpenShift as a developer or DevOps. Finally, you'll discover how to properly design OpenShift in production environments. This book gives you hands-on experience of designing, building, and operating OpenShift Origin 3.9, as well as building new applications or migrating existing applications to OpenShift. What you will learn Understand the core concepts behind containers and container orchestration tools Understand Docker, Kubernetes, and OpenShift, and their relation to CRI-O Install and work with Kubernetes and OpenShift Understand how to work with persistent storage in OpenShift Understand basic and advanced components of OpenShift, including security and networking Manage deployment strategies and application's migration in OpenShift Understand and design OpenShift high availability Who this book is for The book is for system administrators, DevOps engineers, solutions architects, or any stakeholder who wants to understand the concept and business value of OpenShift.

Red Hat RHCSA/RHCE 7 Cert Guide-Sander van Vugt 2015-08-07 Trust the best-selling Cert Guide series from Pearson IT Certification to help you learn, prepare, and practice for exam success. Cert Guides are built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certification exam. Master Red Hat RHCSA (EX200) and RHCE (EX300) exam topics Assess your knowledge with chapter-opening quizzes Review key concepts with exam preparation tasks Test yourself with 4 practice exams (2 RHCSA and 2 RHCE) Gain expertise and knowledge using the companion website, which contains over 40 interactive exercises, 4 advanced CLI simulations, 40 interactive quizzes and glossary quizzes (one for each chapter), 3 virtual machines and more. Red Hat RHCSA/RHCE 7 Cert Guide presents you with an organized test preparation routine through the use of proven series elements and techniques. "Do I Know This Already?" quizzes open each chapter and allow you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending labs help you drill on key concepts you must know thoroughly. Red Hat RHCSA/RHCE 7, Premium Edition eBook and Practice Test focuses specifically on the objectives for the newest Red Hat RHCSA (EX200) and RHCE (EX300) exams reflecting Red Hat Enterprise Linux 7. Expert Linux trainer and consultant Sander van Vugt shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. Well-regarded for its level of detail, assessment features, comprehensive design scenarios, and challenging review questions and exercises, this study guide helps you master the concepts and techniques that will allow you to succeed on the exam the first time. This study guide helps you master all the topics on the new RHCSA (EX200) and RHCE (EX300) exams, including Part 1: RHCSA Basic System Management: Installation, tools, text files, server connections; user, group, and permissions management; network configuration Operating Running Systems: Process management, VMs,

package installation, task scheduling, logging, managing partitions and LVM logical volumes Advanced System Administration: Basic kernel management, basic Apache server configuration, boot procedures/troubleshooting Managing Network Services: Using Kickstart; managing SELinux; configuring firewalls, remote mounts, FTP, and time services Part 2: RHCE System Configuration/Management: External authentication/authorization, iSCSI SANs, performance reporting, optimization, logging, routing/advanced networking, Bash scripting System Security: Configuring firewalls, advanced Apache services, DNS, MariaDB, NFS, Samba, SMTP, SSH, and time synchronization

Red Hat RHCE 8 (EX294) Cert Guide-Sander van Vugt 2020-10 Red Hat RHCE(TM) 8 Cert Guide is designed to help you pass the newest version of the Hat Certified Engineer exam for Red Hat Enterprise Linux 8, and master the skills you need to automate Linux and execute common system administration tasks with Red Hat(R) Ansible(R) Engine. The most comprehensive and time-efficient RHCE 8 prep guide available, it's also an extraordinarily cost-effective complement to other training, including the author's own RHCE Complete Video Course. Authored by a leading Red Hat trainer, consultant, and speaker, it presents focused, straight-to-the-point coverage of every exam topic, including: Performing Core Red Hat system administration tasks Understanding Ansible core components Installing and configuring Ansible control nodes Configuring Ansible managed nodes Administering scripts Performing system administration tasks with Ansible modules Working with roles Using advanced Ansible features such as templates and Ansible Vault From start to finish, this guide is organized to help you focus your study time where you need the most help, so you can retain more, and earn higher scores. It offers: Step-by-step chapter labs to help you practice what you've just learned Pre-exam theoretical exam to help you decide if you're ready for the real exam Two realistic RHCE sample exams delivered through Pearson's state-of-the-art test engine Pre-chapter "Do I Know This Already" (DIKTA) quizzes to assess your knowledge of each chapter's content, so you can decide how much time to spend on each section Foundation Topics sections thoroughly explaining concepts and theory, and linking them to real-world configurations and commands Key Topics icons flagging every figure, table, or list you absolutely must understand and remember End of chapter Glossary terms Chapter-ending Exam Preparation sections delivering even more exercises and troubleshooting scenarios

Getting Started with OpenShift-Steve Pousty 2014-05-14 Intrigued by the possibilities of developing web applications in the cloud? With this concise book, you get a quick hands-on introduction to OpenShift, the open source Platform as a Service (PaaS) offering from Red Hat. You'll learn the steps necessary to build, deploy, and host a complete real-world application on OpenShift, without having to read long, detailed explanations of the technologies involved. Though the book uses Python, application examples in other languages are available on GitHub. If you can build web applications, use a command line, and program in Java, Python, Ruby, Node.js, PHP, or Perl, you're ready to get started. Dive in and create your first example application with OpenShift Modify the example with your own code and hot-deploy the changes Add components such as a database, task scheduling, and monitoring Use external libraries and dependencies in your application Delve into networking, persistent storage, and backup options Explore ways to adapt your team processes to use OpenShift Learn OpenShift terms, technologies, and commands Get a list of resources to learn more about OpenShift and PaaS

IBM Storage for Red Hat OpenShift Blueprint Version 1 Release 3- 2020 IBM Storage for Red Hat OpenShift is a comprehensive container-ready solution that includes all the hardware & software components necessary to setup and/or expand your Red Hat OpenShift environment. This blueprint includes Red Hat OpenShift Container Platform and uses Container Storage Interface (CSI) standards. IBM Storage brings enterprise data services to containers. In this blueprint, learn how to: · Combine the benefits of IBM Systems with the performance of IBM Storage solutions so that you can deliver the right services to your clients today! · Build a 24 by 7 by 365 enterprise class private cloud with Red Hat OpenShift Container Platform utilizing new open source Container Storage interface (CSI) drivers · Leverage enterprise class services such as NVMe based flash performance, high data availability, and advanced container security IBM Storage for Red Hat OpenShift Container Platform is designed for your DevOps environment for on-premises deployment with easy-to-consume components built to perform and scale for your enterprise. Simplify your journey to cloud with pre-tested and validated blueprints engineered to enable rapid deployment and peace of mind as you move to a hybrid multicloud environment. You now have the capabilities.

The DevOps Handbook:-Gene Kim 2016-10-06 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.

Accelerating Modernization with Agile Integration-Adeline SE Chun 2020-07-01 The organization pursuing digital transformation must embrace new ways to use and deploy integration technologies, so they can move quickly in a manner appropriate to the goals of multicloud, decentralization, and microservices. The integration layer must transform to allow organizations to move boldly in building new customer experiences, rather than forcing models for architecture and development that pull away from maximizing the organization's productivity. Many organizations have started embracing agile application techniques, such as microservice architecture, and are now seeing the benefits of that shift. This approach complements and accelerates an enterprise's API strategy. Businesses should also seek to use this approach to modernize their existing integration and messaging infrastructure to achieve more effective ways to manage and operate their integration services in their private or public cloud. This IBM® Redbooks® publication explores the merits of what we refer to as agile integration; a container-based, decentralized, and microservice-aligned approach for integration solutions that meets the demands of agility, scalability, and resilience required by digital transformation. It also discusses how the IBM Cloud Pak for Integration marks a significant leap forward in integration technology by embracing both a cloud-native approach and container technology to achieve the goals of agile integration. The target audiences for this book are cloud integration architects, IT specialists, and application developers.

Learn Helm-Andrew Block 2020-06-10 A comprehensive introduction to automated application deployment on Kubernetes for beginners Key Features Effectively manage applications deployed in Kubernetes using Helm Learn to install, upgrade, share, and manage applications deployed in Kubernetes Get up and running with a package manager for Kubernetes Book Description Containerization is currently known to be one of the best ways to implement DevOps. While Docker introduced containers and changed the DevOps era, Google developed an extensive container orchestration system, Kubernetes, which is now considered the frontrunner in container orchestration. With the help of this book, you'll explore the efficiency of managing applications running on Kubernetes using Helm. Starting with a short introduction to Helm and how it can benefit the entire container environment, you'll then delve into the architectural aspects, in addition to learning about Helm charts and its use cases. You'll understand how to write Helm charts in order to automate application deployment on Kubernetes. Focused on providing enterprise-ready patterns relating to Helm and automation, the book covers best practices for application development, delivery, and lifecycle management with Helm. By the end of this Kubernetes book, you will have learned how to leverage Helm to develop an enterprise pattern for application delivery. What you will learn Develop an enterprise automation strategy on Kubernetes using Helm Create easily consumable and configurable Helm charts Use Helm in orchestration tooling and Kubernetes operators Explore best practices for application delivery and life cycle management Leverage Helm in a secure and stable manner that is fit for your enterprise Discover the ins and outs of automation with Helm Who this book is for This book is for Kubernetes developers or administrators who are interested in learning Helm to provide automation for application development on Kubernetes. Although no prior knowledge of Helm is required, basic knowledge of Kubernetes application development will be useful.

Programming with POSIX Threads-David R. Butenhof 1997 Software -- Operating Systems.

OpenShift OKD on IBM LinuxONE, Installation Guide-Narjisse Zaki 2019-10-21 This document provides the step-by-step instructions for installing OpenShift OKD 3.10 on LinuxONE. The intended audience is Systems Architects and Specialists who design, size, and implement solutions on IBM® infrastructures.

Kubernetes in Action-Marko Luksa 2018-01-20 Summary Kubernetes in Action is a comprehensive guide to effectively developing and running applications in a Kubernetes environment. Before diving into Kubernetes, the book gives an overview of container technologies like Docker, including how to build containers, so that even readers who haven't used these technologies before can get up and running. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Kubernetes is Greek for "helmsman," your guide through unknown waters. The Kubernetes container orchestration system safely manages the structure and flow of a distributed application, organizing containers and services for maximum efficiency. Kubernetes serves as an operating system for your clusters, eliminating the need to factor the underlying network and server infrastructure into your designs. About the Book Kubernetes in Action teaches you to use Kubernetes to deploy container-based distributed applications. You'll start with an overview of Docker and Kubernetes before building your first Kubernetes cluster. You'll gradually expand your initial application, adding features and deepening your knowledge of Kubernetes architecture and operation. As you navigate this comprehensive guide, you'll explore high-value topics like monitoring, tuning, and scaling. What's Inside Kubernetes' internals Deploying containers across a cluster Securing clusters Updating applications with zero downtime About the Reader Written for intermediate software developers with little or no familiarity with Docker or container orchestration systems. About the Author Marko Luksa is an engineer at Red Hat working on Kubernetes and OpenShift. Table of Contents PART 1 - OVERVIEW Introducing Kubernetes First steps with Docker and Kubernetes PART 2

- CORE CONCEPTS Pods: running containers in Kubernetes Replication and other controllers: deploying managed pods Services: enabling clients to discover and talk to pods Volumes: attaching disk storage to containers ConfigMaps and Secrets: configuring applications Accessing pod metadata and other resources from applications Deployments: updating applications declaratively StatefulSets: deploying replicated stateful applications PART 3 - BEYOND THE BASICS Understanding Kubernetes internals Securing the Kubernetes API server Securing cluster nodes and the network Managing pods' computational resources Automatic scaling of pods and cluster nodes Advanced scheduling Best practices for developing apps Extending Kubernetes

IBM Storage for Red Hat OpenShift Blueprint Version 1 Release 4- 2020 IBM Storage for Red Hat OpenShift is a comprehensive container-ready solution that includes all the hardware & software components necessary to setup and/or expand your Red Hat OpenShift environment. This blueprint includes Red Hat OpenShift Container Platform and uses Container Storage Interface (CSI) standards. IBM Storage brings enterprise data services to containers. In this blueprint, learn how to:

- Combine the benefits of IBM Systems with the performance of IBM Storage solutions so that you can deliver the right services to your clients today!
- Build a 24 by 7 by 365 enterprise class private cloud with Red Hat OpenShift Container Platform utilizing new open source Container Storage interface (CSI) drivers
- Leverage enterprise class services such as NVMe based flash performance, high data availability, and advanced container security

IBM Storage for Red Hat OpenShift Container Platform is designed for your DevOps environment for on-premises deployment with easy-to-consume components built to perform and scale for your enterprise. Simplify your journey to cloud with pre-tested and validated blueprints engineered to enable rapid deployment and peace of mind as you move to a hybrid multicloud environment. You now have the capabilities.

WildFly Administration Guide-Francesco Marchioni 2020-04-01 WildFly is the most popular open-source Java application server. This book is an in-depth guide to the administration and management of the of the application server, covering all of the latest architectural and management changes such as:

- How to achieve High Availability of your WildFly cluster
- How to configure the newest subsystems (agroal, mp subsystems)
- Delivering advanced and leak-proof Datasource configuration
- Provisioning custom Server distributions with Galleon tool.
- Using the Undertow Web server as front-end for mod_cluster and as Reverse Proxy Server
- Migrating your older legacy configurations to WildFly newer subsystems
- Securing the application server with Elytron Framework
- Configuring a robust JMS cluster with Apache Artemis MQ
- Running WildFly in the cloud with Openshift and CRC
- Configuring Eclipse Micro Profiles and much more, with improved online examples!

Yeah, reviewing a book **red hat open shift enterprise administration** could add your near friends listings. This is just one of the solutions for you to be successful. As understood, finishing does not recommend that you have astonishing points.

Comprehending as well as harmony even more than other will come up with the money for each success. next to, the revelation as with ease as sharpness of this red hat open shift enterprise administration can be taken as without difficulty as picked to act.

[ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION](#)