Do407 Red Hat Ansible Automation Auldhouse

This textbook offers an exhaustive, step-by-step guide through the powerful features of the Oracle Business Intelligence (BI) product suite. One will learn the concepts, methods and techniques for building sophisticated data analytic modules. Analytic results are then organized into interactive dashboards. A solid foundation is laid for one to progress onto the latest and most advanced data analytic capabilities. The following specific topics are included in this guide book: Background discussion of data warehousing, business intelligence (BI) and data analytics presented in a form that business professionals can readily understand; Background concepts regarding logical data models, star schema and snowflake schema warehouse models; How to build analytical models using fact tables, dimensions, dimension hierarchies, cubes, measures and other multidimensional data model objects; Use interactive Dashboards to analyze data, uncover trends and make strategic business decisions; Export BI results to productivity software such as Microsoft Office or other external systems; Design customized Dashboards to reflect an individual's role, perspective or business interest; Creating data analyses and dynamically interact with results produced from Oracle BI; Format analyses using sorts, filters and prompts; Format column output, subtotaling, customization of column properties and transforming column data using formulas; Create results with compound layouts, including views such as tabular, chart, pivot table, gauge and others; Manage content, permissions and access within the Presentation Catalog. This textbook includes dozens of learning exercises, with detailed point-and-click solutions also provided.
Get a hands-on introduction to the Chef, the configuration management tool for solving operations issues in enterprises large and small. Ideal for developers and sysadmins new to configuration management, this guide shows you to automate the packaging and delivery of applications in your infrastructure. You'll be able to build (or rebuild) your infrastructure's application stack in minutes or hours, rather than days or weeks. After teaching you how to write Ruby-based Chef code, this book walks you through different Chef tools and configuration management concepts in each chapter, using detailed examples throughout. All you need to get started is command-line experience and familiarity with basic system administration. Configure your Chef development environment and start writing recipes Create Chef cookbooks with recipes for each part of your infrastructure Use Test Kitchen to manage sandbox testing environments Manage single nodes with Chef client, and multiple nodes with Chef Server Use data bags for storing shared global data between nodes Simulate production Chef Server environments with Chef Zero Classify different types of services in your infrastructure with roles Model life stages of your application, including development, testing, staging, and production
Modern businesses generate huge volumes of accounting data on a daily basis. The recent advancements in information technology have given organizations the ability to capture and store data in an efficient and effective manner. However, there is a widening gap between this data storage and usage of the data. Business intelligence techniques can help an organization obtain and process relevant accounting data quickly and cost efficiently. Such techniques include: query and reporting tools, online

analytical processing (OLAP), statistical analysis, text mining, data mining, and visualization. Business Intelligence Techniques is a compilation of chapters written by experts in the various areas. While these chapters stand on their own, taken together they provide a comprehensive overview of how to exploit accounting data in the business environment.

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

From the author of the vSphere Clustering Deep Dive series - The VMware vSphere 6.5 Host Resources Deep Dive is a guide to building consistent high-performing ESXi hosts. A book that people can't put down. Written for administrators, architects, consultants, aspiring VCDX-es and people eager to learn more about the elements that control the behavior of CPU, memory, storage and network resources. This book shows that we can fundamentally and materially improve the systems we're building. We can make the currently running ones consistently faster by deeply understanding and optimizing our systems. The reality is that specifics of the infrastructure matter. Details matter. Especially for distributed platforms which abstract resource layers, such as NSX and vSAN. Knowing your systems inside and out is the only way to be sure you've properly handled those details. It's about having a passion for these details. It's about loving the systems we build. It's about understanding them end-to-end. This book explains the concepts and mechanisms behind the physical resource components and the VMkernel resource schedulers, which enables you to: Optimize your workload for current and future Non-Uniform Memory Access (NUMA) systems. Discover how vSphere Balanced Power Management takes advantage of the CPU Turbo Boost functionality, and why High Performance does not. How the 3-DIMMs per Channel configuration results in a 10-20% performance drop. How TLB works and why it is bad to

disable large pages in virtualized environments. Why 3D XPoint is perfect for the vSAN caching tier. What queues are and where they live inside the end-to-end storage data paths. Tune VMkernel components to optimize performance for VXLAN network traffic and NFV environments. Why Intel's Data Plane Development Kit significantly boosts packet processing performance.

'The Effective Change Manager' is designed for change management practitioners, employers, authors, academics and anyone with an interest in this growing professional discipline of change management. This first edition The Change Management Body of Knowledge (CMBoK) draws on the experience of more than six hundred change management professionals in thirty countries. Starting with what change managers do - 'The Effective Change Manager' describes what change managers must know in order to display those competencies effectively - and to deliver change successfully. The Change Management Institute (CMI) is an independent professional organization that is uniquely positioned to promote and advance the interests of Change Management. Since 2005, the CMI has been providing opportunities for change management professionals to build knowledge and skills and network with other professionals.

The highly respected RHCE certification from Red Hat, Inc. indicates that the person has passed a realistic performance-based lab exam that tests his or her ability to install and configure Red Hat Linux, configure basic networking and file systems for a network, configure the X Window System, perform essential Red Hat Linux system administration, configure basic security for a network server, and carry out server diagnostics and troubleshooting. Red Hat recently updated the RHCE program for Red Hat Enterprise Linux, version 9.0. Previous edition ISBN: 0782127932.

Red Hat RHCE 8 (EX294) Cert GuidePearson It Certification

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.

A hands-on, introductory book about managing infrastructure with Terraform. Start small and then build on what you learn to scale up to complex infrastructure. Written for both developers and sysadmins. Focuses on how to build infrastructure and applications with Terraform. The book contains: Chapter 1: An Introduction to Terraform Chapter 2: Installing Terraform Chapter 3: Building our first application Chapter 4: Provisioning and Terraform Chapter 5: Collaborating with Terraform Chapter 6: Building a multi-environment architecture Chapter 7: Infrastructure testing Updated for Terraform 0.12!

The best fully integrated study system available (Exams EX200 and EX300) With hundreds of review questions and complete coverage of performance-based requirements, RHCSA/RHCE Red Hat Linux Certification Study Guide, Sixth Edition covers what you need to know--and shows you how to prepare--for these challenging exams. 100% complete coverage of all official objectives for Exams EX200 and EX300 Exam Readiness Checklist--you're ready for the exam when all objectives on the list are checked off Inside the Exam sections in every chapter highlight key exam topics covered Two-Minute Drills for quick review 100+ lab questions--two full lab-based RHCSA exams and two full lab-based RHCE exams--match the format, tone, topics, and difficulty of the real exam Covers all the exam topics, including: Virtual Machines and Automated Installations * Fundamental Command Line Skills * RHCSA-Level Security Options * The Boot Process * Linux Filesystem Administration * Package Management * User Administration * RHCSA-Level System Administration * RHCE Security * System Services and SELinux * RHCE Administration * Mail Servers * Samba * File Sharing * DNS, FTP, and Logging CD-ROM includes: Complete lab-based exam preparation, featuring: Two full RHCSA practice exams Two full RHCE practice exams Lab-based chapter self tests In-depth answer explanations for all labs RHCSA and RHCE Glossary PDF copy of the book for studying on the go Michael Jang, RHCE, LPIC-2, UCP, LCP, MCP, is the author of three previous bestselling editions of RHCE Red Hat Certified Engineer Linux Study Guide and several other books on Linux and professional certification.

Design automation blueprints using Ansible's playbooks to orchestrate and manage your multi-tier infrastructure About This Book Get to grips with Ansible's features such as orchestration, automatic node discovery, and data encryption Create data-driven, modular and reusable automation code with Ansible roles, facts, variables, and templates A step-by-step approach to automating and managing system and application configurations effectively using Ansible's playbooks Who This Book Is For If you are a systems or automation engineer who intends to automate common infrastructure tasks, deploy applications, and use orchestration to configure systems in a co-ordinated manner, then this book is for you. Some understanding of the Linux/UNIX command line

interface is expected. What You Will Learn Write simple tasks and plays Organize code into a reusable, modular structure Separate code from data using variables and Jinja2 templates Run custom commands and scripts using Ansible's command modules Control execution flow based on conditionals Integrate nodes and discover topology information about other nodes in the cluster Encrypt data with ansible-vault Create environments with isolated configurations to match application development workflow Orchestrate infrastructure and deploy applications in a coordinated manner In Detail Ansible combines configuration management, orchestration, and parallel command execution into a single tool. Its batteries-included approach and built-in module library makes it easy to integrate it with cloud platforms, databases, and notification services without requiring additional plugins. Playbooks in Ansible define the policies your systems under management enforce. They facilitate effective configuration management rather than running ad hoc scripts to deploy complex applications. This book will show you how to write a blueprint of your infrastructure encompassing multi-tier applications using Ansible's playbooks. Beginning with the basic concepts such as plays, tasks, handlers, inventory, and the YAML syntax that Ansible uses, you will see how to organize your code into a modular structure. Building on this, you will master techniques to create data-driven playbooks with variables, templates, logical constructs, and encrypted data. This book will also take you through advanced clustering concepts such as discovering topology information, managing multiple environments, and orchestration. By the end of this book, you will be able to design solutions to your automation and orchestration problems using playbooks quickly and efficiently. Style and approach This book follows a step-by-step approach, with the concepts explained in a conversational and easy-to-follow style. Each topic is explained sequentially in the process of creating a course. A comprehensive explanation of the basic and advanced features of Ansible playbooks is also included.

Build, manage, and control an open hybrid cloud infrastructure using Red Hat CloudForms About This Book Understand the infrastructure management capabilities through monitoring and tracking techniques Control the hybrid cloud infrastructure using policies and define actions based on events and conditions Learn to view and use trends in the hybrid setup to perform capacity planning and optimization Who This Book Is For If you are an existing Red Hat administrator who is new to Red Hat Cloud Infrastructure and would like to manage and deploy Hybrid clouds, then this book is for you. Red Hat Linux administration experience is assumed. What You Will Learn Install and configure Red Hat CloudForms 3.1 in the Red Hat Enterprise Linux OpenStack platform Add Amazon EC2 and OpenStack as Cloud providers and adding VMware as an infrastructure provider Provision an EC2 instance Manage lifecycle of virtual machines and instances Create custom domains, namespaces, classes, schemas, instances, and invoke automation workflows Monitor and gather intelligence information about the Hybrid Cloud environment Get to know about supported APIs that can be used to integrate third-party systems with Red Hat CloudForms In Detail The increasing adoption of the Cloud has led to enterprises having a heterogeneous IT environment that consists of both private and public cloud infrastructures, and in most cases existing virtualized infrastructures as well. As building and managing such a diverse IT infrastructure is a major challenges, Red Hat CloudForms provides a unified, consistent, and comprehensive

management platform. With features like cloud intelligence dashboard, self-service portal, lifecycle management, policy-based governance, quotas, capacity management, monitoring and reporting, Red Hat CloudForms lets you manage your hybrid cloud infrastructure from a single pane of glass. This book will equip you with a hands-on approach on how to build a hybrid cloud environment and then manage, control, and gain operational insights into it. The book starts by showing you how to install and configure Red Hat CloudForms, and add infrastructure and cloud providers to build the hybrid cloud environment. Next, you will learn to provision virtual machines and instances to these platform providers, and manage and control the lifecycle of these resources. You will also get to know about automating provisioning. Moving on, you'll get to grips with the management of resources using policies, events, conditions, and actions. You'll also learn to monitor these resources from a single pane of glass. Finally, the book covers viewing capacity and utilization trends to optimize the overall hybrid cloud infrastructure, and also introduces you to supported APIs. By end of the book, you will be able to deploy and use Red Hat CloudForms. Style and approach This book is an easy-to-follow guide that explains all topics in a sequential manner, building upon each other to finally create and manage the Hybrid Cloud environment.

The Microsoft Technology Associate certification (MTA) curriculum helps instructors teach and validate fundamental technology concepts with a foundation for sudents' careers as well as the confidence they need to succeed in advanced studies. Through the use of MOAC MTA titles you can help ensure your students future success in and out of the classroom. This MTA text covers the following Microsoft .NET fundamental skills: • Understanding .NET Framework Concepts • Understanding Namespaces and Classes in the .NET Framework • Understanding .NET Code Compilation • Understanding I/O Classes in the .NET Framework • Understanding Security Click here to learn more about the Microsoft Technology Associate (MTA), a new and innovative certification track designed to provide a pathway for future success in technology courses and careers.

This book is your concise guide to Ansible, the simple way to automate apps and IT infrastructure. In less than 250 pages, this book takes you from knowing nothing about configuration management to understanding how to use Ansible in a professional setting. You will learn how to create an Ansible playbook to automatically set up an environment, ready to install an open source project. You'll extract common tasks into roles that you can reuse across all your projects, and build your infrastructure on top of existing open source roles and modules that are available for you to use. You will learn to build your own modules to perform actions specific to your business. By the end you will create an entire cluster of virtualized machines, all of which have your applications and all their dependencies installed automatically. Finally, you'll test your Ansible playbooks. Ansible can do as much or as little as you want it to. Ansible: From Beginner to Pro will teach you the key skills you need to be an Ansible professional. You'll be writing roles and modules and creating entire environments without human intervention in no time at all – add it to your library today. What You Will Learn Learn why Ansible is so popular and how to download and install it Create a playbook that automatically downloads and installs a popular open source project Use open source roles to complete common tasks, and write your own specific to your business Extend Ansible by writing your own modules Test your infrastructure using Test Kitchen and

ServerSpec Who This Book Is For Developers that currently create development and production environments by hand. If you find yourself running apt-get install regularly, this book is for you. Ansible adds reproducibility and saves you time all at once. Ansible: From Beginner to Pro is great for any developer wanting to enhance their skillset and learn new tools.

Test Automation using Selenium with Java - This book teaches how to automate using Selenium.

Until recently, Hadoop deployments existed on hardware owned and run by organizations. Now, of course, you can acquire the computing resources and network connectivity to run Hadoop clusters in the cloud. But there's a lot more to deploying Hadoop to the public cloud than simply renting machines. This hands-on guide shows developers and systems administrators familiar with Hadoop how to install, use, and manage cloud-born clusters efficiently. You'll learn how to architect clusters that work with cloud-provider features—not just to avoid pitfalls, but also to take full advantage of these services. You'll also compare the Amazon, Google, and Microsoft clouds, and learn how to set up clusters in each of them. Learn how Hadoop clusters run in the cloud, the problems they can help you solve, and their potential drawbacks Examine the common concepts of cloud providers, including compute capabilities, networking and security, and storage Build a functional Hadoop cluster on cloud infrastructure, and learn what the major providers require Explore use cases for high availability, relational data with Hive, and complex analytics with Spark Get patterns and practices for running cloud clusters, from designing for price and security to dealing with maintenance

Big data technologies are used to achieve any type of analytics in a fast and predictable way, thus enabling better human and machine level decision making. Principles of distributed computing are the keys to big data technologies and analytics. The mechanisms related to data storage, data access, data transfer, visualization and predictive modeling using distributed processing in multiple low cost machines are the key considerations that make big data analytics possible within stipulated cost and time practical for consumption by human and machines. However, the current literature available in big data analytics needs a holistic perspective to highlight the relation between big data analytics and distributed processing for ease of understanding and practitioner use. This book fills the literature gap by addressing key aspects of distributed processing in big data analytics. The chapters tackle the essential concepts and patterns of distributed computing widely used in big data analytics. This book discusses also covers the main technologies which support distributed processing. Finally, this book provides insight into applications of big data analytics, highlighting how principles of distributed computing are used in those situations. Practitioners and researchers alike will find this book a valuable tool for their work, helping them to select the appropriate technologies, while understanding the inherent strengths and drawbacks of those technologies.

Docker is rapidly changing the way organizations deploy software at scale. However, understanding how Linux

containers fit into your workflow—and getting the integration details right—is not a trivial task. With the updated edition of this practical guide, you'll learn how to use Docker to package your applications with all of their dependencies and then test, ship, scale, and support your containers in production. This edition includes significant updates to the examples and explanations that reflect the substantial changes that have occurred over the past couple of years. Sean Kane and Karl Matthias have added a complete chapter on Docker Compose, deeper coverage of Docker Swarm mode, introductions to both Kubernetes and AWS Fargate, examples on how to optimize your Docker images, and much more. Learn how Docker simplifies dependency management and deployment workflow for your applications Start working with Docker images, containers, and command line tools Use practical techniques to deploy and test Docker containers in production Debug containers by understanding their composition and internal processes Deploy production containers at scale inside your data center or cloud environment Explore advanced Docker topics, including deployment tools, networking, orchestration, security, and configuration

A simple way to provision and manage your Amazon Cloud infrastructureAbout This Book- Get started with AWS management for infrastructure engineers- Explore techniques to set up and manage your private cloud using Ansible- A practical guide to help you manage AWS-based applications and infrastructure using AnsibleWho This Book Is ForIf you are an infrastructure engineer, system administrator, or Dev Ops engineer, this book is for you. You will find this book helpful if you have previous experience with Linux systems administration, including familiarity with the command line, file system, and text editing. Prior basic knowledge of Amazon Web Services and some experience with Ansible is assumed.What You Will Learn- Set up your own AWS account and get started with the AWS console- Use Ansible Playbook to configure and launch EC2 instances- Delve deeper into the AWS cloud infrastructure and create and manage VPC- Provision Amazon Relational Database Service (RDS) with Ansible- Manage files in an Amazon Simple Storage Service (S3) bucket using Ansible- Extend Ansible's functionality in the AWS environment- Use Ansible to provision ELB and Auto Scaling groups- Manage IAM users, groups, roles, and keys- See how to refine and chain together AWS tools using AnsibleIn DetailLooking to get a simple and efficient way to manage your Amazon Cloud infrastructure? Ansible is exactly what you need. This book will show you how to use Ansible's cloud modules to easily provision and manage AWS resources including EC2, VPC, RDS, S3, ELB, ElastiCache, and Route 53. We'll take you beyond the basics of Ansible, showing you real-world examples of AWS infrastructure automation and management with detailed steps, complete code, and screen captures from the AWS console.The example projects inside this title will help you grasp the process leading to full AWS automation. From a single WordPress site to a highly available and scalable WordPress site, we'll demonstrate the power of using Ansible to provision and automate AWS-based infrastructure

deployment.Style and approachThis hands-on guide will help you get acquainted with techniques to implement AWS for your private cloud.

Highlights: > Updated to the latest version of Red Hat Enterprise Linux 7 > Upated to cover ALL official exam objectives for the RHCSA and RHCE exams based on Red Hat Enterprise Linux 7 > Equally good for self-study and in-class training > Step-by-step exercises to accomplish tasks > Do-It-Yourself challenge labs at the end of each chapter > Concepts explained with diagrams > Commands and options summarized in tables > Exam tips included > FOUR scenario-based sample exams (TWO for RHCSA and TWO for RHCE) > TWENTY-FIVE chapters (THIRTEEN for RHCSA and TWELVE for RHCE) > Separate sections on RHCSA and RHCE RHCSA Section (chapters 1 to 13): covers local and network (automated with kickstart) RHEL7 installations, general Linux concepts and basic tools, compression and archiving, text file editing, file manipulation and security, processes and task scheduling, bash shell features, software package administration, yum repository configuration, host virtualization, virtual machines, system boot, kernel management, system initialization and service management with systemd, local logging, users and groups, LVM and file systems, AutoFS, Swap, ACLs, firewall, SELinux, network interfaces, NTP/LDAP clients, SSH, and TCP Wrappers. RHCE Section (chapters 14 to 25): covers shell scripting, interface bonding and teaming, IPv6 and routing configuration, NTP, firewalld, Kerberos authentication, kernel tuning, resource utilization reporting, network logging, block storage sharing with iSCSI, file sharing with NFS and Samba/CIFS, HTTP/HTTPS web servers and virtual hosting, Postfix mail SMTP, DNS, and MariaDB. Each chapter lists major topics and relevant exam objectives in the beginning and ends with a summary followed by review questions/answers and Do-It-Yourself challenge labs.

Foundations in Accountancy (FIA) awards are entry-level, core-skill focused qualifications from ACCA. They provide flexible options for students and employers, and as official ACCA Approved Learning Provider - Content, BPP Learning Media's study materials are tailored to the exams students will take.

Rather than focusing on a specific software title, the authors explain the theories which are true for any system, and so provide a solid and structured background for aspiring software developers to build upon. With a new design and new features within the text, the book is now even easier to follow and the examples and exercises have also been restructured to improve the knowledge flow to the student. The accessible approach to systems analysis and design is suitable for computer science students on any introductory course, or for those coming from other disciplines with an interest in software development. The 'just-a-line' case study which runs throughout the book takes a clear line from systems design, through development to implementation and release and provides coverage of project management techniques and testing and crisis management. The book is supported by an Online Learning Centre with many

resources for students and lecturers. - The well-established and highly regarded presentation and writing style is clear and compelling for both the student and the lecturer. - There are many examples and exercises, especially in areas often found challenging, like normalisation. -

Whether you want to automate tasks, analyze data, parse logs, talk to network services, or address other systems requirements, writing your own command-line tool may be the fastest - and perhaps the most fun - way to do it. The Go programming language is a great choice for developing tools that are fast, reliable, and cross-platform. Create command-line tools that work with files, connect to services, and even manage external processes, all while using tests and benchmarks to ensure your programs are fast and correct. When you want to develop cross platform command-line tools that are fast and reliable, use Go, a modern programming language that combines the reliability of compiled languages with the ease of use and flexibility of dynamic typed languages. Work through practical examples to develop elegant and efficient tools by applying Go's rich standard library, its built in support for concurrency, and its expressive syntax. Use Go's integrated testing capabilities to automatically test your tools, ensuring they work reliably even across code refactoring. Develop CLI tools that interact with your users by using common input/output patterns, including environment variables and flags. Handle files to read or persist data, and manipulate paths consistently in cross-platform scenarios. Control processes and handle signals, and use a benchmark driven approach and Go's concurrency primitives to create tools that perform well. Use powerful external libraries such as Cobra to create modern and flexible tools that handle subcommands, and develop tools that interact with databases, APIs, and network services. Finally, leverage what you learned by tackling additional challenges at the end of each chapter. What You Need: Go 1.8 or higher, an internet connection to download the example files and additional libraries, and a text editor to write your programs.

If you want to learn how to use Ansible to automate an infrastructure, either from scratch or to augment your current tooling with Ansible, then this is the book for you. It has plenty of practical examples to help you get to grips with Ansible.

Among the many configuration management tools available, Ansible has some distinct advantages—it's minimal in nature, you don't need to install anything on your nodes, and it has an easy learning curve. This practical guide shows you how to be productive with this tool quickly, whether you're a developer deploying code to production or a system administrator looking for a better automation solution. Author Lorin Hochstein shows you how to write playbooks (Ansible's configuration management scripts), manage remote servers, and explore the tool's real power: built-in declarative modules. You'll discover that Ansible has the functionality you need and the simplicity you desire. Understand how Ansible differs from other configuration management systems Use the YAML file format to write your own playbooks Learn Ansible's support for variables and facts Work with a complete example to deploy a non-trivial application Use roles to simplify and reuse playbooks Make playbooks run faster with ssh multiplexing, pipelining, and parallelism Deploy applications to Amazon EC2 and other cloud platforms Use Ansible to create Docker images and deploy Docker containers

Like sysadmins before them, network engineers are finding that they cannot do their work manually anymore. As the field faces new protocols, technologies, delivery models, and a pressing need for businesses to be more agile and flexible, network automation is becoming essential. This practical guide shows network engineers how to use a range of technologies and tools—including Linux, Python, JSON, and XML—to automate their systems through code. Network programming and automation will help you simplify tasks involved in configuring, managing, and operating network equipment, topologies, services, and connectivity. Through the course of the book, you'll learn the basic skills and tools you need to make this critical transition. This book covers: Python programming basics: data types, conditionals, loops, functions, classes, and modules Linux fundamentals to provide the foundation you need on your network automation journey Data formats and models: JSON, XML, YAML, and YANG for networking Jinja templating and its applicability for creating network device configurations The role of application programming interfaces (APIs) in network automation Source control with Git to manage code changes during the automation process How Ansible, Salt, and StackStorm open source automation tools can be used to automate network devices Key tools and technologies required for a Continuous Integration (CI) pipeline in network operations

This practical book provides the concepts and code you need to develop software with Android, the open-source platform for cell phones and mobile devices that's generating enthusiasm across the industry. Based on the Linux operating system and developed by Google and the Open Handset Alliance, Android has the potential to unite a fragmented mobile market. Android Application Development introduces this programming environment, and offers you a complete working example that demonstrates Android architectural features and APIs. With this book, you will: Get a complete introduction to the Android programming environment, architecture, and tools Build a modular application, beginning with a core module that serves to launch modules added in subsequent chapters Learn the concepts and architecture of a specific feature set, including views, maps, location-based services, persistent data storage, 2D and 3D graphics, media services, telephony services, and messaging Use ready-to-run example code that implements each feature Delve into advanced topics, such as security, custom views, performance analysis, and internationalization The book is a natural complement to the existing Android documentation provided by Google. Whether you want to develop a commercial application for mobile devices, or just want to create a mobile mashup for personal use, Android Application Development demonstrates how you can design, build, and test applications for the new mobile market.

This book is for anyone who wants to learn Intel Galileo for home automation and cross-platform software development. No knowledge of programming with Intel Galileo is assumed, but knowledge of the C programming language is essential.

A data warehouse (DW) is a system used in computing for data analysis and reporting. It is a core component of business intelligence. It stores integrated historical and current data from one or more sources. Data can be characterized according to data integration, time-variance, subject orientation, volatility, granularity, etc. It is then arranged into groups, facts and aggregate facts. The sources of data are cleansed, catalogued, transformed and used for data mining, market research, decision support and online analytical processing. The ways to analyze or retrieve the data, transform, load and extract data and manage the data dictionary are essential components of a data warehousing system. Data warehouses can be designed using the bottom-up, top-down or hybrid design models. This book aims to shed light on some of the unexplored aspects of data warehousing. Most of the topics introduced herein cover new techniques and applications of this field. Those in search of information to further their knowledge will be greatly assisted by this textbook.

C# & the .Net Framework - Quick Reference Guide is a very useful resource for developers and serves well as a quick reference guide. This E-Book prepares you for technical interviews in Microsoft .Net Framework and the C# language. It includes lots of important topics covering

major portion of .Net, C# and OOPS. It also includes an introduction to Design Patterns. The book contains all the major topics to strengthen your base and enhance your knowledge. It also contains in depth explanation of complicated topics and includes coding samples wherever applicable. C# & the .Net Framework - Quick Reference Guide has all the ingredients to serve as your best companion during interviews and later during professional development using .Net.

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

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.

Deploy a SharePoint farm in a repeatable, predictable, and reliable fashion using Infrastructure as Code (IaC) techniques to automate

provisioning. Savvy IT pros will learn how to use DevOps practices and open source tools to greatly reduce costs, and streamline management operations for SharePoint farms deployed via Amazon Web Services (AWS), Azure, or on premise. DevOps for SharePoint will help you navigate the complex challenges of deploying and managing SharePoint Server farms. You will learn how to reduce time-consuming tasks and errors when generating development, testing, or production environments. And you will benefit from learning proven methods to apply Microsoft updates with minimal downtime and productivity loss. Whether you are a SharePoint architect, IT pro, or developer helping customers with the SharePoint platform, this book will teach you the most useful DevOps practices to tackle those issues and broaden your skill set. What You'll Learn Understand the basics of the most popular open source tools—Vagrant, Packer, Terraform, and Ansible—and how to use them in the context of deploying and scaling a SharePoint farm Use Vagrant to build SharePoint development environments in less than an hour, and add automated testing Use Packer to create a "golden image" with preconfigured settings, and then use it as the base image in your Terraform configuration for both AWS and Azure farms Use Terraform to scale your SharePoint farm topology Use Red Hat's Ansible Playbooks to perform configuration management on your farm Use Terraform to deploy immutable infrastructure environments using IaC (Infrastructure as Code) Use InSpec 2.0 to stay in compliance by testing your cloud infrastructure Use Ansible to apply Microsoft updates and patches Who This Book Is For IT pros and developers who are looking to expand their knowledge and take a modern approach by using open source technologies to work with Microsoft products. Experience installing SharePoint, and a basic understanding of either Azure or AWS, is helpful.

Make the most of your Mac with this witty, authoritative guide to macOS Big Sur. Apple updates its Mac operating system every year, adding new features with every revision. But after twenty years of this updating cycle without a printed user guide to help customers, feature bloat and complexity have begun to weigh down the works. For thirty years, the Mac faithful have turned to David Pogue's Mac books to guide them. With Mac Unlocked, New York Times bestselling author Pogue introduces readers to the most radical Mac software redesign in Apple history, macOS Big Sur. Beginning Mac users and Windows refugees will gain an understanding of the Mac philosophy; Mac veterans will find a concise guide to what's new in Big Sur, including its stunning visual and sonic redesign, the new Control Center for quick settings changes, and the built-in security auditing features. With a 300 annotated illustrations, sparkling humor, and crystal-clear prose, Mac Unlocked is the new gold-standard guide to the Mac.

This book constitutes the thoroughly refereed post-proceedings of two joint RECOMB 2006 satellite events: the Second Annual Workshop on Systems Biology, RSB 2006, and the First Biennial Workshop on Computational Proteomics, RCP 2006, held in San Diego, CA, USA in December 2006. The papers cover various aspects of systems biology and explore the use of computational mass spectrometry in various proteomic applications.

> Covers Red Hat Enterprise Linux 8 > Covers ALL official exam objectives for the RHCSA exam based on Red Hat Enterprise Linux 8 > Equally good for self-study and in-class training > 81 Step-by-Step exercises > 70 Do-It-Yourself Challenge Labs > 375 Check Your Understanding Questions & Answers > Concepts explained with diagrams > Commands and options summarized in tables > Exam tips included > 4 Unique Sample RHCSA Exams This book has 21 chapters that are organized logically. It covers the topics on local RHEL 8 installation; initial interaction with the system and basic commands; compression and archiving; file editing and manipulation; standard and special permissions; file searching and access controls; user monitoring and authentication files; users, groups, and password aging; bash shell features and startup files; processes and task scheduling; basic and advanced software administration techniques; system boot process

and bootloader; kernel management and system initialization; logging and system tuning; basic and advanced storage management tools and solutions; local and remote file systems and swap regions; network device and connection configuration; time synchronization and hostname resolution; the secure shell service; and firewall and SELinux controls. Each chapter highlights the major topics and relevant exam objectives at the beginning, and ends with review questions & answers and Do-It-Yourself challenge labs. Throughout the book, figures, tables, screen shots, examples, and exam tips have been furnished to support explanation and exam preparation. This book includes four sample exams for RHCSA, which are expected to be done using the knowledge and skills attained from reading the material and practicing the exercises and challenge labs. The labs and the sample exams include references to relevant topics and/or exercises.

Power up your network applications with Python programming Key Features Master Python skills to develop powerful network applications Grasp the fundamentals and functionalities of SDN Design multi-threaded, event-driven architectures for echo and chat servers Book Description This Learning Path highlights major aspects of Python network programming such as writing simple networking clients, creating and deploying SDN and NFV systems, and extending your network with Mininet. You'll also learn how to automate legacy and the latest network devices. As you progress through the chapters, you'll use Python for DevOps and open source tools to test, secure, and analyze your network. Toward the end, you'll develop client-side applications, such as web API clients, email clients, SSH, and FTP, using socket programming. By the end of this Learning Path, you will have learned how to analyze a network's security vulnerabilities using advanced network packet capture and analysis techniques. This Learning Path includes content from the following Packt products: Practical Network Automation by Abhishek Ratan Mastering Python Networking by Eric Chou Python Network Programming Cookbook, Second Edition by Pradeeban Kathiravelu, Dr. M. O. Faruque Sarker What you will learn Create socket-based networks with asynchronous models Develop client apps for web APIs, including S3 Amazon and Twitter Talk to email and remote network servers with different protocols Integrate Python with Cisco, Juniper, and Arista eAPI for automation Use Telnet and SSH connections for remote system monitoring Interact with websites via XML-RPC, SOAP, and REST APIs Build networks with Ryu, OpenDaylight, Floodlight, ONOS, and POX Configure virtual networks in different deployment environments Who this book is for If you are a Python developer or a system administrator who wants to start network programming, this Learning Path gets you a step closer to your goal. IT professionals and DevOps engineers who are new to managing network devices or those with minimal experience looking to expand their knowledge and skills in Python will also find this Learning Path useful. Although prior knowledge of networking is not required, some experience in Python programming will be helpful for a better understanding of the concepts in the Learning Path.

This is a must for the serious Photoshop user! Power, Speed & Automation explores how to customize and automate Photoshop to increase your speed and productivity. With numerous step-by-step instructions, the authors-two of Adobe's own software developers!- walk you through the steps to best tailor Photoshop's interface to your personal workflow; write and apply Actions; and use batching and scripts to process large numbers of images quickly and automatically. You will learn how to build your own dialogs and panels to improve your production workflows in Photoshop, the secrets of changing keyboard shortcuts and menus, and ways to tune your system for optimal performance. Writing new processes using JavaScript is also covered, as well as leveraging Variables with data sets. Learn how to get more work done? more easily and quickly? with this essential guide! *This book can be used with any version of Photoshop through CS6!*