Centos High Availability

Current companies and communities of practice are involved in intensive networking and collaborative systems by a great variety of electronic relations and collaborative interactions. This has resulted in entangled systems that need to be managed efficiently and in an autonomous way, thus facing many issues and challenges. The extensive research produced in this book will help virtual organizations to exploit latest and powerful technologies based on Grid and Wireless infrastructures as well as Cloud computing in order to alleviate complex issues and challenges arisen in networking and collaborative systems, in terms of collaborative applications, resource management, mobility, and security and system resilience. The ultimate aim of the book is to stimulate research that leads to the creation of responsive environments for networking and, at longer-term, the development of adaptive, secure, mobile, and intuitive intelligent systems for collaborative work and learning. Academic researchers, professionals and practitioners in the field will be inspired and put in practice the ideas and experiences proposed in the book in order to evaluate them for their specific research and work.

Cloud Computing: Implementation, Management, and Security provides an understanding of what cloud computing really means, explores how disruptive it may become in the future, and examines its advantages and disadvantages. It gives business executives the knowledge necessary to make informed, educated decisions regarding cloud initiatives. The authors first discuss the evolution of computing from a historical perspective, focusing primarily on advances that led to the development of cloud computing. They then survey some of the critical components that are necessary to make the cloud computing paradigm feasible. They also present various standards based on the use and implementation issues surrounding cloud computing and describe the infrastructure management that is maintained by cloud computing service providers. After addressing significant legal and philosophical issues, the book concludes with a hard look at successful cloud computing vendors. Helping to overcome the lack of understanding currently preventing even faster adoption of cloud computing, this book arms readers with guidance essential to make smart, strategic decisions on cloud initiatives.

This six-volume-set (CCIS 231, 232, 233, 234, 235, 236) constitutes the refereed proceedings of the International Conference on Computing, Information and Control, ICCIC 2011, held in Wuhan, China, in September 2011. The papers are organized in two volumes on Innovative Computing and Information (CCIS 231 and 232), two volumes on Computing and Intelligent Systems (CCIS 233 and 234), and in two volumes on Information and Management Engineering (CCIS 235 and 236).

Get hands-on recipes to automate and manage Linux containers with the Docker 1.6 environment and jump-start your Puppet development About This Book

Successfully deploy DevOps with proven solutions and recipes Automate your infrastructure with Puppet and combine powerful DevOps methods Deploy and manage highly scalable applications using Kubernetes streamline the way you manage your applications Who This Book Is For This Learning Path is for developers, system administrators, and DevOps engineers who want to use Puppet, Docker, and Kubernetes in their development, QA, or production environments. This Learning Path assumes experience with Linux administration and requires some experience with command-line usage and basic text file editing. What You Will Learn Discover how to build high availability Kubernetes clusters Deal with inherent issues with container virtualization and container concepts Create services with Docker to enable the swift development and deployment of applications Make optimum use of Docker in a testing environment Create efficient manifests to streamline your deployments Automate Puppet master deployment using Git hooks, r10k, and PuppetDB In Detail With so many IT management and DevOps tools on the market, both open source and commercial, it's difficult to know where to start. DevOps is incredibly powerful when implemented correctly, and here's how to get it done. This Learning Path covers three broad areas: Puppet, Docker, and Kubernetes. This Learning Path is a large resource of recipes to ease your daily DevOps tasks. We begin with recipes that help you develop a complete and expert understanding of Puppet's latest and most advanced features. Then we provide recipes that help you efficiently work with the Docker environment. Finally, we show you how to better manage containers in different scenarios in production using Kubernetes. This course is based on these books: Puppet Cookbook, Third Edition Docker Cookbook Kubernetes Cookbook Style and approach This easy-to-follow tutorialstyle guide teaches you precisely how to configure complex systems in Puppet and manage your containers using Kubernetes.

Take container cluster management to the next level; learn how to administer and configure Kubernetes on CoreOS; and apply suitable management design patterns such as Configmaps, Autoscaling, elastic resource usage, and high availability. Some of the other features discussed are logging, scheduling, rolling updates, volumes, service types, and multiple cloud provider zones. The atomic unit of modular container service in Kubernetes is a Pod, which is a group of containers with a common filesystem and networking. The Kubernetes Pod abstraction enables design patterns for containerized applications similar to object-oriented design patterns. Containers provide some of the same benefits as software objects such as modularity or packaging, abstraction, and reuse. CoreOS Linux is used in the majority of the chapters and other platforms discussed are CentOS with OpenShift, Debian 8 (jessie) on AWS, and Debian 7 for Google Container Engine. CoreOS is the main focus becayse Docker is preinstalled on CoreOS out-of-the-box. CoreOS: Supports most cloud providers (including Amazon AWS EC2 and Google Cloud Platform) and virtualization platforms (such as VMWare and VirtualBox) Provides Cloud-Config for

declaratively configuring for OS items such as network configuration (flannel), storage (etcd), and user accounts Provides a production-level infrastructure for containerized applications including automation, security, and scalability Leads the drive for container industry standards and founded appc Provides the most advanced container registry, Quay Docker was made available as open source in March 2013 and has become the most commonly used containerization platform. Kubernetes was open-sourced in June 2014 and has become the most widely used container cluster manager. The first stable version of CoreOS Linux was made available in July 2014 and since has become one of the most commonly used operating system for containers. What You'll Learn Use Kubernetes with Docker Create a Kubernetes cluster on CoreOS on AWS Apply cluster management design patterns Use multiple cloud provider zones Work with Kubernetes and tools like Ansible Discover the Kubernetes-based PaaS platform OpenShift Create a high availability website Build a high availability Kubernetes master cluster Use volumes, configmaps, services, autoscaling, and rolling updates Manage compute resources Configure logging and scheduling Who This Book Is For Linux admins, CoreOS admins, application developers, and container as a service (CAAS) developers. Some pre-requisite knowledge of Linux and Docker is required. Introductory knowledge of Kubernetes is required such as creating a cluster, creating a Pod, creating a service, and creating and scaling a replication controller. For introductory Docker and Kubernetes information, refer to Pro Docker (Apress) and Kubernetes Microservices with Docker (Apress). Some pre-requisite knowledge about using Amazon Web Services (AWS) EC2, CloudFormation, and VPC is also required. This book is targeted at system engineers and system administrators who want to upgrade their knowledge and skills in high availability and want to learn practically how to achieve high availability with CentOS Linux. You are expected to have good CentOS Linux knowledge and basic networking experience. Gain the essential skills and hands-on expertise required to pass the LPIC-3 300 certification exam. This book provides the insight for you to confidently install, manage and troubleshoot OpenLDAP, Samba, and FreeIPA. Helping you to get started from scratch, this guide is divided into three comprehensive sections covering everything you'll need to prepare for the exam. Part 1 focuses on OpenLDAP and topics including securing the directory, integration with PAM and replication. Part 2 covers Samba and teaches you about Samba architecture, using different back ends, print services, and deploying Samba as a stand-alone server, PDC, and Active Directory Domain Controller. Finally, Part 3 explains how to manage FreeIPA and how to integrate it with Active Directory. Practical LPIC-3 300 is the perfect study guide for anyone interested in the LPIC-3 300 certification exam, OpenLDAP, Samba, or FreeIPA. What You'll Learn Integrate LDAP with PAM and NSS, and with Active Directory and Kerberos Manage OpenLDAP replication and server performance tuning Use Samba as a PDC and BDC Configure Samba as a domain member server in an existing NT domain

Use Samba as an AD Compatible Domain Controller Replicate, manage, and integrate FreeIPA Who This Book Is For This book is for anyone who is preparing for the LPIC-3 300 exam, or those interested in learning about OpenLDAP and Samba in general.

This book constitutes the refereed post-conference proceedings of the 11th IFIP TC 3 World Conference on Computers in Education, WCCE 2017, held in Dublin, Ireland, in July 2017. The 57 revised full papers and 10 short papers were carefully reviewed and selected from 116 submissions during two rounds of reviewing and improvement. The papers are organized in the following topical sections: futures of technology for learning and education; innovative practices with learning technologies; and computer science education and its future focus and development. Also included is "The Dublin Declaration" which identifies key aspects of innovation, development successes, concerns and interests in relation to ICT and education.

How can you help your Drupal website continue to perform at the highest level as it grows to meet demand? This comprehensive guide provides best practices, examples, and in-depth explanations for solving several performance and scalability issues. You'll learn how to apply coding and infrastructure techniques to Drupal internals, application performance, databases, web servers, and performance analysis. Covering Drupal versions 7 and 8, this book is the ideal reference for everything from site deployment to implementing specific technologies such as Varnish, memcache, or Solr. If you have a basic understanding of Drupal and the Linux-Apache-MySQL-PHP (LAMP) stack, you're ready to get started. Establish a performance baseline and define goals for improvement Optimize your website's code and front-end performance Get best and worst practices for customizing Drupal core functionality Apply infrastructure design techniques to launch or expand a site Use tools to configure, monitor, and optimize MySQL performance Employ alternative storage and backend search options as your site grows Tune your web servers through httpd and PHP configuration Monitor services and perform load tests to catch problems before they become critical

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Cloud computing is rapidly expanding in its applications and capabilities through various parts of society. Utilizing different types of virtualization technologies can push this branch of computing to even greater heights. Design and Use of Virtualization Technology in Cloud Computing is a crucial resource that provides in-depth discussions on the background of virtualization, and the ways it can help shape the future of cloud computing technologies. Highlighting relevant topics including grid computing, mobile computing, open source virtualization, and virtualization in education, this scholarly reference source is ideal for computer engineers, academicians, students, and researchers that are interested in learning more about how to infuse current cloud computing technologies with virtualization advancements.

Authoritative guide to a rapidly growing Linux distribution This is one of the first, if not the first comprehensive guide to the CentOS Linux operating system. Linux guru Tim Bornocyzyk, thoroughly covers the topic whether you're a Linux novice or a regular who now wants to master this increasingly popular distribution. First find out how to install and configure CentOS. From there, you'll cover a wealth of Linux and CentOS tools, functions, and techniques, including: how to work in the GNOME and KDE desktop environments; how to use the Linux shell, file system, and text editor; how to configure CUPS printers, Samba for file and printer sharing and other features using GUI tools; and more. CentOS (Community ENTerprise Operating System) is a Linux operating system maintained by a small team of core developers

based on Red Hat Enterprise Linux (RHEL) Lead author Christopher Negus is the bestselling Linux author of such books as Fedora 10 and Red Hat Enterprise Linux Bible and Linux 2009 Edition Bible; he is also a member of the Red Hat Enterprise Linux training team Tech edited by key member of the CentOS development team, Ralph Angenendt, and foreword written by lead CentOS developer, Karanbir Singh. Learn how to set up users, automate system tasks, back up and restore files, and prepare for the latest security issues and threats; also learn how to use and customize the desktop menus, icons, window manager, and xterm; and how to create and publish formatted documents Explores available Linux multimedia applications for graphics, audio, video and CD burning The DVD includes complete copy of the most current CentOS Distribution – CentOS 5.3 For getting the most out of CentOS Linux, this is the book you need to succeed. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Anyone can setup an Asterisk system, however many fail in setting up a reliable Asterisk system. Here we will show you how to build not only an Asterisk system that's stable but one that has HA (High Availability), using Pacemaker, CentOS and MySql

Deploy and manage today's essential services on an enterprise-class, open operating system About This Book Configure and manage Linux servers in varying scenarios and for a range of business requirements Explore the up-to-date features of CentOS using real-world scenarios See practical and extensive recipes to deploy and manage CentOS Who This Book Is For This book is for Linux professionals with basic Unix/Linux functionality experience, perhaps even having set up a server before, who want to advance their knowledge in administering various services. What You Will Learn See how to deploy CentOS easily and painlessly, even in multiserver environments Configure various methods of remote access to the server so you don't always have to be in the data center Make changes to the default configuration of many services to harden them and increase the security of the system Learn to manage DNS, emails and web servers Protect yourself from threats by monitoring and logging network intrusion and system intrusion attempts, rootkits, and viruses Take advantage of today's powerful hardware by running multiple systems using virtualization In Detail CentOS is derived from Red Hat Enterprise Linux (RHEL) sources and is widely used as a Linux server. This book will help you to better configure and manage Linux servers in varying scenarios and business requirements. Starting with installing CentOS, this book will walk you through the networking aspects of CentOS. You will then learn how to manage users and their permissions, software installs, disks, filesystems, and so on. You'll then see how to secure connection to remotely access a desktop and work with databases. Toward the end, you will find out how to manage DNS, emails, web servers, and more. You will also learn to detect threats by monitoring network intrusion. Finally, the book will cover virtualization techniques that will help you make the most of CentOS. Style and approach This easy-to-read cookbook is filled with practical recipes. Hands-on, task-based exercises will present you with real-world solutions to deploy and manage CentOS in varying business scenarios.

A concise walk-through of CentOS 7, starting from installation to securing it's environment. Key Features No previous Linux environment experience needed for reading this book Get comfortable with a popular and stable Red Hat Enterprise Linux distribution Most of the command line based concepts are explained with graphics Book Description Linux kernel development has been the worlds largest collaborative project to date. With this practical guide, you will learn Linux through one of its most popular and stable distributions. This book will introduce you to essential Linux skills using CentOS 7. It describes how a Linux system is organized, and will introduce you to key command-line concepts you can practice on your own. It will guide you in performing basic system administration tasks and day-to-day operations in a Linux environment. You will learn core system administration skills for managing a system running CentOS 7 or a similar operating system, such as RHEL 7, Scientific Linux, and Oracle

Linux. You will be able to perform installation, establish network connectivity and user and process management, modify file permissions, manage text files using the command line, and implement basic security administration after covering this book. By the end of this book, you will have a solid understanding of working with Linux using the command line. What you will learn Understand file system hierarchy and essential command-line skills Use Vi editor, I/O redirections and how to work with common text manipulating tools Create, delete, modify user accounts and manage passwords and their aging policy Manage file ownership, permissions, and ACL Execute process management and monitoring on the command line Validate and manage network configuration using nmcli Manage remote logins using SSH and file transfer using SCP and Rsync Understand system logging, how to control system services with systemd and systemctl, and manage firewalld Who this book is for Any individual who wants to learn how to use Linux as server or desktop in his environment. Whether you are a developer, budding system administrator, or tech lover with no previous Linux administration background, you will be able to start your journey in Linux using CentOS 7 with this book. The Sarbanes-Oxley Act (officially titled the Public Company Accounting Reform and Investor Protection Act of 2002), signed into law on 30 July 2002 by President Bush, is considered the most significant change to federal securities laws in the United States since the New Deal. It came in the wake of a series of corporate financial scandals, including those affecting Enron, Arthur Andersen, and WorldCom. The law is named after Senator Paul Sarbanes and Representative Michael G. Oxley. It was approved by the House by a vote of 423-3 and by the Senate 99-0. This book illustrates the many Open Source cost-saving opportunities that public companies can explore in their IT enterprise to meet mandatory compliance requirements of the Sarbanes-Oxley act. This book will also demonstrate by example and technical reference both the infrastructure components for Open Source that can be made compliant, and the Open Source tools that can aid in the journey of compliance. Although many books and reference material have been authored on the financial and business side of Sox compliance, very little material is available that directly address the information technology considerations. even less so on how Open Source fits into that discussion. The format of the book will begin each chapter with the IT business and executive considerations of Open Source and SOX compliance. The remaining chapter verbiage will include specific examinations of Open Source applications and tools which relate to the given subject matter. * Only book that shows companies how to use Open Source tools to achieve SOX compliance, which dramatically lowers the cost of using proprietary, commercial applications. * Only SOX compliance book specifically detailing steps to achieve SOX compliance for IT Professionals. CentOS is just like Red Hat, but without the price tag and with the virtuous license. When belts have to be tightened, we want to read about an OS with all the features of a commercial Linux variety, but without the pain. The Definitive Guide to CentOS is the first definitive reference for CentOS and focuses on CentOS alone, the workhorse Linux distribution, that does the heavy lifting in small and medium-size enterprises without drawing too much attention to itself. Provides tutorial and hands-on learning but is also designed to be used as a reference Bases all examples on real-world tasks that readers are likely to perform Serves up hard-won examples and hints and tips from the author's experiences of CentOS in production

Create high availability clusters to enhance system performance using CentOS 7 About This Book Master the concepts of high performance and high availability to eliminate performance bottlenecks Maximize the uptime of services running in a CentOS 7 cluster A step-by-step guide that will provide knowledge of methods

and approaches to optimize the performance of CentOS clusters Who This Book Is For This book is targeted at system administrators: those who want a detailed, step-by-step guide to learn how to set up a high-availability CentOS 7 cluster, and those who are looking for a reference book to help them learn or refresh the necessary skills to ensure their systems and respective resources are utilized optimally. No previous knowledge of high-availability systems is needed, though the reader is expected to have at least some degree of familiarity with any spinoff of the Fedora family of Linux distributions, preferably CentOS. What You Will Learn Install a CentOS 7 cluster and network infrastructure Configure firewall, networking, and clustering services and settings Set up and test a HAC (highavailability cluster) to host an Apache web server and a MariaDB database server Monitor performance and availability Identify bottlenecks and troubleshoot issues Improve performance and ensure high availability In Detail CentOS is the enterprise level Linux OS, which is 100% binary compatible to Red Hat Enterprise Linux (RHEL). It acts as a free alternative to RedHat's commercial Linux offering, with only a change in the branding. A high performance cluster consists in a group of computers that work together as one set parallel, hence minimizing or eliminating the downtime of critical services and enhancing the performance of the application. Starting with the basic principles of clustering, you will learn the necessary steps to install a cluster with two CentOS 7 servers. We will then set up and configure the basic required network infrastructure and clustering services. Further, you will learn how to take a proactive approach to the split-brain issue by configuring the failover and fencing of the cluster as a whole and the guorum of each node individually. Further, we will be setting up HAC and HPC clusters as a web server and a database server. You will also master the art of monitoring performance and availability, identifying bottlenecks, and exploring troubleshooting techniques. At the end of the book, you'll review performance-tuning techniques for the recently installed cluster, test performance using a payload simulation, and learn the necessary skills to ensure that the systems, and the corresponding resources and services, are being utilized to their best capacity. Style and approach An easy-to-follow and step-by-step guide with hands-on instructions to set up real-world simple cluster scenarios that will start you on the path to building more complex applications on your own. Bu kitap; Linux dünyas?na yeni ad?m atan kullan?c?lar?n yan?s?ra, orta seviye kullan?c?lara da hitap edecek ?ekilde haz?rlanm??t?r. ?lk on bölümde; CentOS'un sistem taraf? incelenirken, di?er bölümlerde özellikle sunucu yönetimine ilgi duyan ki?iler için s?k kullan?lan sunucu servislerine yer verilmi?tir. E?itim setinde; sistem taraf? için paket yönetimi, log yönetimi, yedekleme mekanizmas? konular? uygulamal? olarak kitaptaki konular? destekleyecek ?ekilde ele al?nm??, sunucu k?sm? için de kurulum ve yap?land?rmalar ayr?nt?lar?yla birlikte aç?klanm??t?r. Böylelikle kendi laboratuvar?n?z? kurarak, e?itim seti ile ayn? anda uygulamaya geçebilmeniz ve i?lemlerin mant???n? daha iyi kavraman?z amaçlanm??t?r. • Linux'a Giri? • Kullan?c? ve Grup Yönetimi •

Sistemin Aç?l??? ve Süreçler • Zamanlanm?? Görevler • Yaz?l?m Kurulumu ve Paket Yönetimi • Log Dosyalar? • A? Yönetimi ve Firewall Yap?land?rmas? • Temel A? Servisleri • Kurulum ve Yap?land?rmalar • VPN Sunucu • FTP Sunucu

- Web Sunucu Mail Sunucu Sanalla?t?rma Sunucusu Yedekleme ??lemleri
- Web Hosting ??lemleri

Use this certification to gather all the information on the topic of LPI LPIC-3 (304-200) Certification exam. The Questions will help you distinguish the type and complexity level of the questions and the Practice Exams will make you familiar with the format of an exam. You should refer this guide carefully before attempting your actual LPI LPIC-3 304 Linux Virtualization and High Availability certification exam. This certification is particularly interesting for candidates who must know and understand the general concepts, theory and terminology of virtualization. This consist of Xen, KVM and libvirt terminology. Key learning points in this certification includes: - Variations of Virtual Machine Monitors -Migration of Physical to Virtual Machines - Migration of Virtual Machines between Host systems - Cloud Computing - IaaS, PaaS, SaaS - Understand the most important cluster architectures - Understand recovery and cluster reorganization mechanisms - Design an appropriate cluster architecture for a given purpose -Application aspects of high availability - Operational considerations of high availability Preparing for the LPIC-3 304-200 Linux Virtualization and High Availability exam to become a certified LPI expert? Here we have brought Best Exam Questions for you so that you can prepare well for this Exam of LPIC-3 304-200 Linux Virtualization and High Availability. Unlike other online simulation practice tests, you get an ebook version that is easy to read & remember these questions. You can simply rely on these questions for successfully certifying this exam.

This book constitutes the proceedings of the 20th International Conference on Technology Enhanced Assessment, TEA 2017, held in Barcelona, Spain, in October 2017. The 17 papers presented were carefully selected from 42 submissions. They are centered around topics like e-learning, computer-assisted instruction, interactive learning environments, collaborative learning, computing education, student assessment. Chapter "Student perception of scalable peerfeedback design in Massive Open Online Courses" is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/). For further details see license information in the chapter.

Over 50 recipes on the core features of Apache Mesos and running big data frameworks in Mesos About This Book Learn to install and configure Mesos to suit the needs of your organization Follow step-by-step instructions to deploy application frameworks on top of Mesos, saving you many hours of research and trial and error Use this practical guide packed with powerful recipes to implement Mesos and easily integrate it with other application frameworks Who This Book Is For This book is for system administrators, engineers, and big data

programmers. Basic experience with big data technologies such as Hadoop or Spark would be useful but is not essential. A working knowledge of Apache Mesos is expected. What You Will Learn Set up Mesos on different operating systems Use the Marathon and Chronos frameworks to manage multiple applications Work with Mesos and Docker Integrate Mesos with Spark and other big data frameworks Use networking features in Mesos for effective communication between containers Configure Mesos for high availability using Zookeeper Secure your Mesos clusters with SASL and Authorization ACLs Solve everyday problems and discover the best practices In Detail Apache Mesos is open source cluster sharing and management software. Deploying and managing scalable applications in large-scale clustered environments can be difficult, but Apache Mesos makes it easier with efficient resource isolation and sharing across application frameworks. The goal of this book is to guide you through the practical implementation of the Mesos core along with a number of Mesos supported frameworks. You will begin by installing Mesos and then learn how to configure clusters and maintain them. You will also see how to deploy a cluster in a production environment with high availability using Zookeeper. Next, you will get to grips with using Mesos, Marathon, and Docker to build and deploy a PaaS. You will see how to schedule jobs with Chronos. We'll demonstrate how to integrate Mesos with big data frameworks such as Spark, Hadoop, and Storm. Practical solutions backed with clear examples will also show you how to deploy elastic big data jobs. You will find out how to deploy a scalable continuous integration and delivery system on Mesos with Jenkins. Finally, you will configure and deploy a highly scalable distributed search engine with ElasticSearch. Throughout the course of this book, you will get to know tips and tricks along with best practices to follow when working with Mesos. Style and approach This stepby-step guide is packed with powerful recipes on using Apache Mesos and shows its integration with containers and big data frameworks. ??????? ????????????????Wi-Fi????????????!EEE 802.11ax????Wi-Fi??????Wi-Fi 6????????????????????????OFDMA??????????MU-M Pak???? ????????? IBM????Red Hat?? ?????????? ????? ???????????????

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??Primary???????????????????????Secondary?????????????????????
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??????????????????????????CentOS 7????????????????? (??)
Master over 100 recipes to design and implement a highly available server with
the advanced features of PostgreSQL About This Book Create a PostgreSQL
cluster that stays online even when disaster strikes Avoid costly downtime and
data loss that can ruin your business Updated to include the newest features
introduced in PostgreSQL 9.6 with hands-on industry-driven recipes Who This
Book Is For If you are a PostgreSQL DBA working on Linux systems who want a
database that never gives up, this book is for you. If you've ever experienced a
database outage, restored from a backup, spent hours trying to repair a
malfunctioning cluster, or simply want to guarantee system stability, this book is
definitely for you. What You Will Learn Protect your data with PostgreSQL
replication and management tools such as Slony, Bucardo, pglogical, and WAL-E
Hardware planning to help your database run efficiently Prepare for catastrophes
and prevent them before they happen Reduce database resource contention with
connection pooling using pgpool and PgBouncer Automate monitoring and alerts
to visualize cluster activity using Nagios and collected Construct a robust
software stack that can detect and fix outages Learn simple PostgreSQL High
Availability with Patroni, or dive into the full power of Pacemaker. In Detail
Databases are nothing without the data they store. In the event of a failure -
catastrophic or otherwise - immediate recovery is essential. By carefully
combining multiple servers, it's even possible to hide the fact a failure occurred at
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all. From hardware selection to software stacks and horizontal scalability, this book will help you build a versatile PostgreSQL cluster that will survive crashes, resist data corruption, and grow smoothly with customer demand. It all begins with hardware selection for the skeleton of an efficient PostgreSQL database cluster. Then it's on to preventing downtime as well as troubleshooting some real life problems that administrators commonly face. Next, we add database monitoring to the stack, using collectd, Nagios, and Graphite. And no stack is complete without replication using multiple internal and external tools, including the newly released pglogical extension. Pacemaker or Raft consensus tools are the final piece to grant the cluster the ability to heal itself. We even round off by tackling the complex problem of data scalability. This book exploits many new features introduced in PostgreSQL 9.6 to make the database more efficient and adaptive, and most importantly, keep it running. Style and approach This book contains practical recipes that will help the reader solve real world problems related to high availability in PostgreSQL. Every recipe is explained in detail, with relevant explanations, tips and tricks provided for quicker and easier understanding.

A guide geared toward seasoned Linux and Unix administrators offers practical knowledge for managing a range of Linux systems and servers, covering such topics as installing servers, setting up e-mail systems, and creating shell scripts.

NGINX is one of the most widely used web servers available today, in part because of its capabilities as a load balancer and reverse proxy server for HTTP and other network protocols. This cookbook provides easy-to-follow examples to real-world problems in application delivery. The practical recipes will help you set up and use either the open source or commercial offering to solve problems in various use cases. For professionals who understand modern web architectures, such as n-tier or microservice designs, and common web protocols including TCP and HTTP, these recipes provide proven solutions for security, software load balancing, and monitoring and maintaining NGINX's application delivery platform. You'll also explore advanced features of both NGINX and NGINX Plus, the free and licensed versions of this server. You'll find recipes for: High-performance load balancing with HTTP, TCP, and UDP Securing access through encrypted traffic, secure links, HTTP authentication subrequests, and more Deploying NGINX to Google Cloud, AWS, and Azure cloud computing services Setting up and configuring NGINX Controller Installing and configuring the NGINX Plus App Protect module Enabling WAF through Controller ADC

Get to know effective ways to improve PostgreSQL's performance and master query optimization, and database monitoring. About This Book Perform essential database tasks such as benchmarking the database and optimizing the server's memory usage Learn ways to improve query performance and optimize the PostgreSQL server Explore a wide range of high availability and replication mechanisms to build robust, highly available, scalable, and fault-tolerant PostgreSQL databases Who This Book Is For If you are a developer or administrator with limited PostgreSQL knowledge and want to develop your skills with this great open source database, then this book is ideal for you. Learning how to enhance the database performance is always an exciting topic to everyone, and this book will show you enough ways to enhance the database performance. What You Will Learn Build replication strategies for homogeneous and heterogeneous databases Test and build a powerful machine with multiple bench marking techniques Get to know a few SQL injection techniques Find out how to manage the replication using multiple tools Benchmark the database server using multiple strategies Work with the

query processing algorithms and their internal behaviors Build a proper plan to upgrade or migrate to PostgreSQL from other databases See the essential database load balancing techniques and the various partitioning approaches PostgreSQL provides Learn memory optimization techniques and database server configurations In Detail PostgreSQL is one of the most powerful and easy to use database management systems. It has strong support from the community and is being actively developed with a new release every year. PostgreSQL supports the most advanced features included in SQL standards. It also provides NoSQL capabilities and very rich data types and extensions. All of this makes PostgreSQL a very attractive solution in software systems. If you run a database, you want it to perform well and you want to be able to secure it. As the world's most advanced open source database, PostgreSQL has unique built-in ways to achieve these goals. This book will show you a multitude of ways to enhance your database's performance and give you insights into measuring and optimizing a PostgreSQL database to achieve better performance. This book is your one-stop guide to elevate your PostgreSQL knowledge to the next level. First, you'll get familiarized with essential developer/administrator concepts such as load balancing, connection pooling, and distributing connections to multiple nodes. Next, you will explore memory optimization techniques before exploring the security controls offered by PostgreSQL. Then, you will move on to the essential database/server monitoring and replication strategies with PostgreSQL. Finally, you will learn about query processing algorithms. Style and approach This comprehensive guide is packed with practical administration tasks. Each topic is explained using examples and a step-by-step approach.

Over 60 simple but incredibly effective recipes focusing on different methods of achieving high availability for MySQL database.

Virtualisierung ist ein beliebter Weg, um Hardware- Ressourcen kostensparend mehreren Gastsystemen zur Verfügung zu stellen. XEN hat sich dabei als intelligente Virtualisierungstechnik bewährt, bei der I/O-APIs, ein zentraler Hypervisor und ein Domänensystem für hohe Geschwindigkeit und hervorragende Isolation der Gastsysteme sorgen. Im nützlichen Rezeptformat aus Aufgabe, Lösung und Erläuterung erfahren Leser in diesem Kochbuch, wie sie XEN 3 installieren, booten und konfigurieren, welche Administrationstools wie genutzt werden können, welche Sicherheitsaspekte zu beachten sind, und vieles mehr.

- This is the latest practice test to pass the 304-200 LPI LPIC-3 Virtualization & High Availability Exam. - It contains 129 Questions and Answers. - All the questions are 100% valid and stable. - You can reply on this practice test to pass the exam with a good mark and in the first attempt.

A guide to RHEL administration covers such topics as web servers, clustering, storage, networking, file sharing, and security.

One of the world's leading problems in the field of national security is protection of borders and borderlands. This book addresses multiple issues on advanced innovative methods of multi-level control of both ground (UGVs) and aerial drones (UAVs). Those objects combined with innovative algorithms become autonomous objects capable of patrolling chosen borderland areas by themselves and automatically inform the operator of the system about potential place of detection of a specific incident. This is achieved by using sophisticated methods of generation of non-collision trajectory for those types of objects and enabling automatic integration of both ground and aerial unmanned vehicles. The topics included in this book also cover presentation of complete information and communication technology (ICT) systems capable of control, observation and detection of various types of incidents and threats. This book is a valuable source of information for constructors and developers of such solutions for uniformed services. Scientists and researchers involved in computer vision, image processing, data fusion, control algorithms or IC can find many valuable suggestions and

solutions. Multiple challenges for such systems are also presented.

Learn to set up the latest CentOS Linux network services including DNS, DHCP, SSH and VNC, Web, FTP, Mail, Firewall, and LDAP, enabling you to provide these services on your own network. CentOS continues to be a popular Linux distribution choice, and setting up your own services is a key skill for anyone maintaining a CentOS network. You will learn how to install CentOS, and manage basic administration. You'll then move onto understanding networking, and how to set up your required services. Each chapter is written in an easy-to-digest format and teaches you how set up, manage, and troubleshoot each service. You'll be running your own network in no time at all. What You Will Learn Install and set up the latest version of CentOS Configure and manage a wide range of network services Solve problems remotely and manage your network efficiently Who This Book Is For Anyone who wants to learn how to set up and manage CentOS Linux network services. Some previous Linux experience is beneficial, but this book is designed to be used by beginners.

"This step-by-step guide teaches you everything you need to know in order to eliminate single points of failure for your Linux, Apache, MySQL, and PHP based web applications. This is a full blown course that demonstrates everything step-by-step. This is not just a design, though. It's an entire course complete with lessons and demonstrations on actual Linux servers. I'll be performing the demonstrations on Ubuntu servers, but the concepts are the same no matter if you're using RedHat Enterprise Linux, CentOS, or another distribution. The only real difference is the couple of commands you'll use to perform some of the software installations. The design and configurations remain the same. Even though this course is targeted directly at the LAMP stack (Linux, Apache, MySQL, PHP), the concepts and techniques presented can be reused in a variety of other situations. If you ever need a floating IP, the ability to add more storage to servers without downtime, to balance loads across multiple servers, or deploy a highly available database cluster, you can put what you learn in this course to good use."--Resource description page.

Pro Linux High Availability Clustering teaches you how to implement this fundamental Linux add-on into your business. Linux High Availability Clustering is needed to ensure the availability of mission critical resources. The technique is applied more and more in corporate datacenters around the world. While lots of documentation about the subject is available on the internet, it isn't always easy to build a real solution based on that scattered information, which is often oriented towards specific tasks only. Pro Linux High Availability Clustering explains essential high-availability clustering components on all Linux platforms, giving you the insight to build solutions for any specific case needed. In this book four common cases will be explained: Configuring Apache for high availability Creating an Open Source SAN based on DRBD, iSCSI and HA clustering Setting up a load-balanced web server cluster with a back-end, highly-available database Setting up a KVM virtualization platform with high-availability protection for a virtual machine. With the knowledge you'll gain from these real-world applications, you'll be able to efficiently apply Linux HA to your work situation with confidence. Author Sander Van Vugt teaches Linux high-availability clustering on training courses, uses it in his everyday work, and now brings this knowledge to you in one place, with clear examples and cases. Make the best start with HA clustering with Pro Linux High Availability Clustering at your side.

PostgreSQL has become the most advanced open source database on the market. This book adopts a step-by-step approach to meet almost every requirement you can think of while deploying PostgreSQL in production environments. You will not only learn how to design and manage your database but also discover how to administer and secure the database.

Learn how to protect, back up, recover, and monitor your data and infrastructure in the cloud with Microsoft's Operations Management Suite (OMS), Azure Backup, and Azure Site Recovery. Implementing Operations Management Suite starts with an overview of the Operations Management Suite, followed by an introduction to Azure virtual machines and virtual networks. Chapters cover Azure Backup and how to configure it, followed by deep dives into aspects of Azure Site Recovery (ASR): how it works, how to configure it, how to streamline your disaster recovery failover from on-premises to Azure, and so on. Learn about protection groups, how to perform planned and unplanned failover, and more. Windows IT pro consultant, trainer and MVP Peter De Tender takes you through the necessary theory and background on each topic along with hands-on step-by-step lab guides to help you implement and configure each feature for yourself. You'll also find out how to estimate your platform costs when using Azure infrastructure components, making this book your one-stop guide to the latest disaster recovery services in Microsoft Azure. What You'll Learn Understand current concepts and challenges in IT disaster recovery Get introduced to Microsoft Azure, Azure virtual networks and Azure virtual machines Protect your data in the cloud with Azure Backup, and the configuration options available Understand how to protect, recover, and monitor your environment with Azure Site Recovery Manager, and the configuration options available Extend Azure Site Recovery Manager to non-Hyper-V workloads Who This Book Is For IT professionals and IT decision makers who are interested in learning about Azure backup and Azure Site Recovery Manager in order to build and/or optimize their IT disaster recovery scenarios.

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