

Programming Amazon Web Services S3 Ec2 Sqs Fps And Simpledb

This book constitutes the refereed proceedings of the Fourth International Conference on Advances in Visual Informatics, IVIC 2015, held in Bangi, Malaysia, in November 2015. The five keynotes and 45 papers presented were carefully reviewed and selected from 82 initial submissions. The papers are organized in four tracks on visualization and big data; machine learning and computer vision; computer graphics; as well as virtual reality.

Summary Amazon Web Services in Action, Second Edition is a comprehensive introduction to computing, storing, and networking in the AWS cloud. You'll find clear, relevant coverage of all the essential AWS services you to know, emphasizing best practices for security, high availability and scalability. Foreword by Ben Whaley, AWS community hero and author. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology The largest and most mature of the cloud platforms, AWS offers over 100 prebuilt services, practically limitless compute resources, bottomless secure storage, as well as top-notch automation capabilities. This book shows you how to develop, host, and manage applications on AWS. About the Book Amazon Web Services in Action, Second Edition is a comprehensive introduction to deploying web applications in the AWS cloud. You'll find clear, relevant coverage of all essential AWS services, with a focus on automation, security, high availability, and scalability. This thoroughly revised edition covers the latest additions to AWS, including serverless infrastructure with AWS Lambda, sharing data with EFS, and in-memory storage with ElastiCache. What's inside Completely revised bestseller Secure and scale distributed applications Deploy applications on AWS Design for failure to achieve high availability Automate your infrastructure About the Reader Written for mid-level developers and DevOps engineers. About the Author Andreas Wittig and Michael Wittig are software engineers and DevOps consultants focused on AWS. Together, they migrated the first bank in Germany to AWS in 2013. Table of Contents PART 1 - GETTING STARTED What is Amazon Web Services? A simple example: WordPress in five minutes PART 2 - BUILDING VIRTUAL INFRASTRUCTURE CONSISTING OF COMPUTERS AND NETWORKING Using virtual machines: EC2 Programming your infrastructure: The command-line, SDKs, and CloudFormation Automating deployment: CloudFormation, Elastic Beanstalk, and OpsWorks Securing your system: IAM, security groups, and VPC Automating operational tasks with Lambda PART 3 - STORING DATA IN THE CLOUD Storing your objects: S3 and Glacier Storing data on hard drives: EBS and instance store Sharing data volumes between machines: EFS Using a relational database service: RDS Caching data in memory: Amazon ElastiCache Programming for the NoSQL database service: DynamoDB PART 4 - ARCHITECTING ON AWS Achieving high availability: availability zones, auto-scaling, and CloudWatch Decoupling your infrastructure: Elastic Load Balancing and Simple Queue Service Designing for fault tolerance Scaling up and down: auto-scaling and CloudWatch

Over 40 hands-on recipes to develop and deploy real-world applications using Amazon EC2 About This Book Design and build applications using Amazon EC2 and a range of supporting AWS tools Find highly effective solutions to your AWS Cloud-based

application development, deployment, and infrastructural issues A comprehensive set of recipes to implement your product's functional and non-functional requirements Who This Book Is For This book is targeted at Cloud-based developers who have prior exposure to AWS concepts and features. Some experience in building small applications and creating some proof-of-concept applications is required. What You Will Learn Select and configure the right EC2 instances Create, configure, and secure a Virtual Private Cloud Create an AWS CloudFormation template Use AWS Identity and Access Management to secure access to EC2 instances Configure auto-scaling groups using CloudWatch Choose and use the right data service such as SimpleDB and DynamoDB for your cloud applications Access key AWS services using client tools and AWS SDKs Deploy AWS applications using Docker containers In Detail Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides flexible and resizable compute capacity in the cloud. The main purpose of Amazon EC2 is to make web-scale cloud computing easier for the developers. It offers developers and companies the raw building blocks like load balancers, object stores and virtual machines running on general hardware (that is, Amazon runs a multitude of hardware components but presents them as a generic utility to its users) with accessible APIs in order to create scalable software products This book covers designing, developing, and deploying scalable, highly available, and secure applications on the AWS platform. By following the steps in the recipes, you will be able to effectively and systematically resolve issues related to development, deployment, and infrastructure for enterprise-grade cloud applications or products. This book starts with helping you choose and configure the right EC2 instances to meet your application-specific requirements. The book then moves on to creating a CloudFormation template and will teach you how to work with stacks. You will then be introduced to using IAM services to configure users, groups, roles, and multi-factor authentication. You will also learn how to connect AD to AWS IAM. Next, you will be using AWS data services and accessing other AWS services including Route 53, Amazon S3, and AWS SES (Amazon Simple Email Service). Finally, you will be deploying AWS applications using Docker containers. Style and approach This book contains a rich set of recipes that cover not only the full spectrum of real-world cloud application development using Amazon EC2, but also the services and security of the applications. The book contains easy-to-follow recipes with step-by-step instructions to leverage EC2 within your applications.

This book constitutes the proceedings of the 6th International ICST Conference, TridentCom 2010, held in Berlin, Germany, in May 2010. Out of more than 100 submitted contributions the Program Committee finally selected 15 full papers, 26 practices papers, and 22 posters. They focus on topics as Internet testbeds, future Internet research, wireless sensors, media and mobility, and monitoring in large scale testbeds.

This book is a guide for you on how to program the Amazon Simple Storage Service (S3). Most people and companies have turned to using the Amazon S3 for the purpose of storing files. The first part of the book guides you on how to upload your files to the Amazon S3. In this chapter, you will use the Play 2 for creation of a Java app. This app will help you to upload your files to the Amazon S3, making your work much easier. You will learn how to use the AWS Library as well as the Play 2 S3 library. The Node.js can be used for the purpose of performing direct uploads of files to the Amazon S3. In most apps, this is done by use of a

web app so that the files can be uploaded to the web server. In this book, you are guided on how to use Node.js to create an app which directly uploads the files to the S3 server, and you will not be expected to create or use a web app. This mechanism employs the use of Cross-Origin Resource Sharing (CORS). This book guides you on how to implement this. You will also be shown how to setup a private maven repository which you can use for your projects. You may also need to read the S3 files in a programmatic manner. This book guides you on how to do this. The following topics are discussed in this book: - Uploading Files - Direct Uploads in S3 and Node.js - Private Maven Repository Setup - Working with the Object-Oriented Java Adapter in AWS S3 - Reading from S3 Files - Working with Nginx as the Proxy

Put the power of AWS Cloud machine learning services to work in your business and commercial applications! Machine Learning in the AWS Cloud introduces readers to the machine learning (ML) capabilities of the Amazon Web Services ecosystem and provides practical examples to solve real-world regression and classification problems. While readers do not need prior ML experience, they are expected to have some knowledge of Python and a basic knowledge of Amazon Web Services. Part One introduces readers to fundamental machine learning concepts. You will learn about the types of ML systems, how they are used, and challenges you may face with ML solutions. Part Two focuses on machine learning services provided by Amazon Web Services. You'll be introduced to the basics of cloud computing and AWS offerings in the cloud-based machine learning space. Then you'll learn to use Amazon Machine Learning to solve a simpler class of machine learning problems, and Amazon SageMaker to solve more complex problems.

- Learn techniques that allow you to preprocess data, basic feature engineering, visualizing data, and model building
- Discover common neural network frameworks with Amazon SageMaker
- Solve computer vision problems with Amazon Rekognition
- Benefit from illustrations, source code examples, and sidebars in each chapter

The book appeals to both Python developers and technical/solution architects. Developers will find concrete examples that show them how to perform common ML tasks with Python on AWS. Technical/solution architects will find useful information on the machine learning capabilities of the AWS ecosystem.

Create dynamic cloud-based websites with Amazon Web Services and this friendly guide! As the largest cloud computing platform in the world, Amazon Web Services (AWS) provides one of the most popular web services options available. This easy-to-understand guide is the perfect introduction to the Amazon Web Services platform and all it can do for you. You'll learn about the Amazon Web Services tool set; how different web services (including S3, Amazon EC2, and Amazon Flexible Payments) and Glacier work; and how you can implement AWS in your organization. Explains how to use Amazon Web Services to store objects, take payments, manage large quantities of data, send e-mails, deploy push notifications, and more from your website Details how AWS can reduce costs, improve efficiency, increase productivity, and cut down on expensive hardware investments - and administrative headaches - in your organization Includes practical examples and helpful step-by-step lists to help you experiment with different AWS features and create a robust website that meets your needs Amazon Web Services For Dummies is exactly what you need to get your head in the cloud with Amazon Web Services!

This book constitutes the proceedings of the International Conference on Cloud Computing and Security (ICCCS 2015) will be held on August 13-15, 2015 in Nanjing, China. The objective of ICCCS 2015 is to provide a forum for researchers, academicians, engineers, industrial professionals, students and government officials involved in the general areas of information security and cloud computing.

Designed for a broad spectrum of people with technically diverse backgrounds, this book covers the most recent developments in Web 2.0 programming topics and applications, including up-to-date material on cloud computing, Google AppEngine, Social Networks, Comet, HTML5, semantic technology, and a chapter on the future of the Web. This book prepares readers for more advanced technical topics in Web 2.0. The accompanying CD-ROM and companion website provide code samples from the book and appendices with an extensive set of links (over 1,000) for supplemental material and links for the Twitter and Facebook pages. (Please note, eBook version does not include CD-ROM).

Cloud computing has revolutionized computer systems, providing greater dynamism and flexibility to a variety of operations. It can help businesses quickly and effectively adapt to market changes, and helps promote users' continual access to vital information across platforms and devices. Cloud Computing Advancements in Design, Implementation, and Technologies outlines advancements in the state-of-the-art, standards, and practices of cloud computing, in an effort to identify emerging trends that will ultimately define the future of the cloud. A valuable reference for academics and practitioners alike, this title covers topics such as virtualization technology, utility computing, cloud application services (SaaS), grid computing, and services computing.

Learning Heroku Postgres is targeted at developers and database admins. Even if you're new to Heroku Postgres, you'll be able to master both the basic as well as advanced features of Heroku Postgres. Since Heroku Postgres is incredibly user-friendly, no previous experience in computer coding or programming is required.

Great POSSIBILITIES and high future prospects to become ten times folds in the near FUTURE DESCRIPTION The book "Handbook of Cloud Computing" provides the latest and in-depth information of this relatively new and another platform for scientific computing which has great possibilities and high future prospects to become ten folds in near future. The book covers in comprehensive manner all aspects and terminologies associated with cloud computing like SaaS, PaaS and IaaS and also elaborates almost every cloud computing service model. The book highlights several other aspects of cloud computing like Security, Resource allocation, Simulation Platforms and futuristic trend i.e. Mobile cloud computing. The book will benefit all the readers with all in-depth technical information which is required to understand current and futuristic concepts of cloud computing. No prior knowledge of cloud computing or any of its related technology is required in reading this book. KEY FEATURES Comprehensively gives clear picture of current state-of-the-art aspect of cloud computing by elaborating terminologies, models and other related terms. Enlightens all major players in Cloud Computing industry providing services in terms of SaaS, PaaS and IaaS. Highlights Cloud Computing Simulators, Security Aspect and Resource Allocation. In-depth presentation with well-illustrated diagrams and simple to understand technical concepts of cloud. WHAT WILL YOU LEARN Cloud Computing, Virtualisation Software as a Service, Platform as a Service, Infrastructure as a Service Data in Cloud and its Security Cloud Computing – Simulation, Mobile Cloud Computing Specific Cloud Service Models Resource Allocation in Cloud Computing WHO THIS BOOK IS FOR Students of Polytechnic Diploma Classes- Computer Science/ Information Technology Graduate Students- Computer Science/ CSE / IT/ Computer Applications

Master Class Students—Msc (CS/IT)/ MCA/ M.Phil, M.Tech, M.S. Researcher's—Ph.D Research Scholars doing work in Virtualization, Cloud Computing and Cloud Security Industry Professionals- Preparing for Certifications, Implementing Cloud Computing and even working on Cloud Security Table of Contents 1. Introduction to Cloud Computing 2. Virtualisation 3. Software as a Service 4. Platform as a Service 5. Infrastructure as a Service 6. Data in Cloud 7. Cloud Security 8. Cloud Computing – Simulation 9. Specific Cloud Service Models 10. Resource Allocation in Cloud Computing 11. Mobile Cloud Computing

Summary Learn Amazon Web Services in a Month of Lunches guides you through the process of building a robust and secure web application using the core AWS services you really need to know. You'll be amazed by how much you can accomplish with AWS! Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Cloud computing has transformed the way we build and deliver software. With the Amazon Web Services cloud platform, you can trade expensive glass room hardware and custom infrastructure for virtual servers and easy-to-configure storage, security, and networking services. Better, because you don't own the hardware, you only pay for the computing power you need! Just learn a few key ideas and techniques and you can have applications up and running in AWS in minutes. About the Book Learn Amazon Web Services in a Month of Lunches gets you started with AWS fast. In just 21 bite-size lessons, you'll learn the concepts and practical techniques you need to deploy and manage applications. You'll learn by doing real-world labs that guide you from the core AWS tool set through setting up security and storage and planning for growth. You'll even deploy a public-facing application that's highly available, scalable, and load balanced. What's Inside First steps with AWS - no experience required Deploy web apps using EC2, RDS, S3, and Route 53 Cheap and fast system backups Setting up cloud automation About the Reader If you know your way around Windows or Linux and have a basic idea of how web applications work, you're ready to start using AWS. About the Author David Clinton is a system administrator, teacher, and writer. He has administered, written about, and created training materials for many important technology subjects including Linux systems, cloud computing (AWS in particular), and container technologies like Docker. Many of his video training courses can be found on Pluralsight.com, and links to his other books (on Linux administration and server virtualization) can be found at <https://bootstrap-it.com>. Table of Contents Before you begin PART 1 - THE CORE AWS TOOLS The 10-minute EC2 web server Provisioning a more robust EC2 website Databases on AWS DNS: what's in a name? S3: cheap, fast file storage S3: cheap, fast system backups AWS security: working with IAM users, groups, and roles Managing growth Pushing back against the chaos: using resource tags CloudWatch: monitoring AWS resources for fun and profit Another way to play: the command-line interface PART 2 - THE AWS POWER USER: OPTIMIZING YOUR INFRASTRUCTURE Keeping ahead of user demand High availability: working with AWS networking tools High availability: load balancing High availability: auto scaling High availability: content-delivery networks PART 3 - FOOD FOR THOUGHT: WHAT ELSE CAN AWS DO FOR YOU? Building hybrid infrastructure Cloud automation: working with Elastic Beanstalk, Docker, and Lambda Everything else (nearly) Never the end

Although you don't need a large computing infrastructure to process massive amounts of data with Apache Hadoop, it can still be difficult to get started. This practical guide shows you how to quickly launch data analysis projects in the cloud by using Amazon Elastic MapReduce (EMR), the hosted Hadoop framework in Amazon Web Services (AWS). Authors Kevin Schmidt and Christopher Phillips demonstrate best practices for using EMR and various AWS and Apache technologies by walking you through the construction of a sample MapReduce log analysis application. Using code samples and example configurations, you'll learn how to assemble the building blocks necessary to solve your biggest data analysis problems. Get an overview of the AWS and Apache software tools used in large-scale data analysis Go through

the process of executing a Job Flow with a simple log analyzer Discover useful MapReduce patterns for filtering and analyzing data sets Use Apache Hive and Pig instead of Java to build a MapReduce Job Flow Learn the basics for using Amazon EMR to run machine learning algorithms Develop a project cost model for using Amazon EMR and other AWS tools

I am pretty sure that you might have heard about AWS being one of the highest paying job roles in today's industry. If yes, then what are you waiting for? Add AWS to your skillset and get a boost in your career. Are you not sure of where to begin? Well, you are in the right place, I have designed this book, keeping an "Absolute Beginner" in my mind and a complete "Hands On" approach, so that you get a perfect practical understanding of the key concepts and best practices when starting off your learning path towards Amazon Web Services. Here is what I have covered inside: Basics of Client-Server Technology The Communication Networks Domain Names Overview of AWS EC2 Overview of AWS S3 Overview of AWS LightSail Overview of AWS Lambda Use of Amazon Web Services How to Developing a Virtual Infrastructure How to Securing Your Network How to Storing Information in the Cloud And much more... This Amazon Web Services guide for beginners is for absolutely anyone seeking to learn the basics of Amazon Web Services (AWS). Even if you have never logged into the AWS platform before, we'll guide you through the fundamentals of cloud computing, until you become more confident with the AWS concepts and terminology. I know you're here to learn, so no programming knowledge is needed, and no prior AWS experience is required. We will walk you through the basics one step at a time. Well, I am pretty sure that by the end of the book, you will 'walk away' with enough knowledge and experience in AWS, and you will never call yourself a Beginner in AWS anymore.

Discover techniques and tools for building serverless applications with AWS Lambda Key Features Learn to write, run, and deploy Lambda functions in the AWS cloud Make the most of AWS Lambda functions to build scalable and cost-efficient systems A practical guide to developing serverless services and applications in Node.js, Java, Python, and C# Book Description AWS Lambda is a part of AWS that lets you run your code without provisioning or managing servers. This enables you to deploy applications and backend services that operate with no upfront cost. This book gets you up to speed on how to build scalable systems and deploy serverless applications with AWS Lambda. The book starts with the fundamental concepts of AWS Lambda, and then teaches you how to combine your applications with other AWS services, such as AmazonAPI Gateway and DynamoDB. This book will also give a quick walk through on how to use the Serverless Framework to build larger applications that can structure code or autogenerate boilerplate code that can be used to get started quickly for increased productivity. Toward the end of the book, you will learn how to write, run, and test Lambda functions using Node.js, Java, Python, and C#. What you will learn Understand the fundamental concepts of AWS Lambda Get to grips with the Serverless Framework and how to create a serverless project Testing and debugging Lambda functions Create a stateful, serverless backend with DynamoDB Program AWS Lambda with Java, Python, and C# Program a lambda function with Node.js Who this book is for This book is primarily for IT architects and developers who want to build scalable systems and deploy serverless applications with AWS Lambda. No prior knowledge of AWS is necessary.

Describing state-of-the-art solutions in distributed system architectures, Integration of Services into Workflow Applications presents a concise approach to the integration of loosely coupled services into workflow applications. It discusses key challenges related to the integration of distributed systems and proposes solutions, both in terms of theoretical aspects such as models and workflow scheduling algorithms, and technical solutions such as software tools and APIs. The book provides an in-depth look at workflow scheduling and proposes a way to integrate several different types of services into one single workflow application. It shows how these components can be expressed as

services that can subsequently be integrated into workflow applications. The workflow applications are often described as acyclic graphs with dependencies which allow readers to define complex scenarios in terms of basic tasks. Presents state-of-the-art solutions to challenges in multi-domain workflow application definition, optimization, and execution Proposes a uniform concept of a service that can represent executable components in all major distributed software architectures used today Discusses an extended model with determination of data flows among parallel paths of a workflow application Since workflow applications often process big data, the book explores the dynamic management of data with various storage constraints during workflow execution. It addresses several practical problems related to data handling, including data partitioning for parallel processing next to service selection and scheduling, processing data in batches or streams, and constraints on data sizes that can be processed at the same time by service instances. Illustrating several workflow applications that were proposed, implemented, and benchmarked in a real BeesyCluster environment, the book includes templates for multidisciplinary workflow applications that readers can use in a wide range of contexts.

"The largest and most mature of the cloud platforms, AWS offers over 100 prebuilt services, practically limitless compute resources, bottomless secure storage, as well as top-notch automation capabilities. This book shows you how to develop, host, and manage applications on AWS. Amazon Web Services in Action, Second Edition is a comprehensive introduction to deploying web applications in the AWS cloud. You'll find clear, relevant coverage of all essential AWS services, with a focus on automation, security, high availability, and scalability. This thoroughly revised edition covers the latest additions to AWS, including serverless infrastructure with AWS Lambda, sharing data with EFS, and in-memory storage with ElastiCache."--Back cover.

A complete guide to building and deploying web apps with Heroku A cloud application platform, Heroku is currently the only approved platform for creating apps within Facebook, and its number of users is growing at rapid pace. However, there are very few books on the market that offer professional-level coverage of this platform, until now. The author duo begins with an introduction to the Heroku platform and its associated core concepts and then goes on to explain how writing for this platform differs from that of traditional development systems. Example applications, additional resources, and advice for your next steps round out this resource, making it a thorough, indispensable guide. Features information not found anywhere else, as both authors work for Heroku Explains the inner workings of Heroku with special emphasis placed on building web and mobile applications Introduces GIT-based development workflow and the process model within the Heroku platform Details coding, building, deploying, and scaling effectively using the Heroku tool base Providing you with fully functional code and downloadable code examples, Professional Heroku Programming is your complete guide to mastering this platform.

Great POSSIBILITIES and high future prospects to become ten times folds in the near FUTURE Key features Comprehensively gives clear picture of current state-of-the-art aspect of cloud computing by elaborating terminologies, models and other related terms. Enlightens all major players in Cloud Computing industry providing services in terms of SaaS, PaaS and IaaS. Highlights Cloud Computing Simulators, Security Aspect and Resource Allocation. In-depth presentation with well-illustrated diagrams and simple to understand technical concepts of cloud. Description The book "e;Handbook of Cloud Computing"e; provides the latest and in-depth information of this relatively new and another platform for scientific computing which has great possibilities and high future prospects to become ten folds in near future. The book covers in comprehensive manner all aspects and terminologies associated with cloud computing like SaaS, PaaS and IaaS and also elaborates almost every cloud computing service model. The book highlights several other aspects of cloud computing like Security, Resource allocation, Simulation Platforms and futuristic trend i.e. Mobile cloud computing. The book will benefit all the readers with all in-depth technical

information which is required to understand current and futuristic concepts of cloud computing. No prior knowledge of cloud computing or any of its related technology is required in reading this book. What will you learn Cloud Computing, Virtualisation Software as a Service, Platform as a Service, Infrastructure as a Service Data in Cloud and its Security Cloud Computing - Simulation, Mobile Cloud Computing Specific Cloud Service Models Resource Allocation in Cloud Computing Who this book is for Students of Polytechnic Diploma Classes- Computer Science/ Information Technology Graduate Students- Computer Science/ CSE / IT/ Computer Applications Master Class Students-Msc (CS/IT)/ MCA/ M.Phil, M.Tech, M.S. Researcher's-Ph.D Research Scholars doing work in Virtualization, Cloud Computing and Cloud Security Industry Professionals- Preparing for Certifications, Implementing Cloud Computing and even working on Cloud Security Table of contents1. Introduction to Cloud Computing2. Virtualisation3. Software as a Service4. Platform as a Service5. Infrastructure as a Service6. Data in Cloud7. Cloud Security 8. Cloud Computing - Simulation9. Specific Cloud Service Models10. Resource Allocation in Cloud Computing11. Mobile Cloud Computing About the authorDr. Anand Nayyar received Ph.D (Computer Science) in Wireless Sensor Networks and Swarm Intelligence. Presently he is working in Graduate School, Duy Tan University, Da Nang, Vietnam. He has total of fourteen Years of Teaching, Research and Consultancy experience with more than 250 Research Papers in various International Conferences and highly reputed journals. He is certified Professional with more than 75 certificates and member of 50 Professional Organizations. He is acting as "e;ACM DISTINGUISHED SPEAKER"e;

A practical, real-world introduction to AWS tools and concepts Amazon Web Services for Mobile Developers: Building Apps with AWS presents a professional view of cloud computing and AWS for experienced iOS/Android developers and technical/solution architects. Cloud computing is a rapidly expanding ecosystem, and working professionals need a practical resource to bring them up-to-date on tools that are rapidly becoming indispensable; this book helps expand your skill set by introducing you to AWS offerings that can make your job easier, with a focus on real-world application. Author and mobile applications developer Abhishek Mishra shows you how to create IAM accounts and try out some of the most popular services, including EC2, Lambda, Mobile Analytics, Device Farm, and more. You'll build a chat application in both Swift (iOS) and Java (Andoid), running completely off AWS Infrastructure to explore SDK installation, Xcode, Cognito authentication, DynamoDB, Amazon SNA Notifications, and other useful tools. By actually using the tools as you learn about them, you develop a more intuitive understanding that feels less like a shift and more like a streamlined integration. If you have prior experience with Swift or Java and a solid knowledge of web services, this book can help you quickly take your skills to the next level with a practical approach to learning that translates easily into real-world use. Understand the key concepts of AWS as applied to both iOS and Android developers Explore major AWS offerings for mobile developers, including DynamoDB, RDS, EC2, SNS, Cognito, and more Learn what people are talking about when they use buzzwords like PaaS, IaaS, SaaS, and APaaS Work through explanations by building apps that tie into the AWS ecosystem Any job is easier with the right tools, and Amazon Web Services for Mobile Developers: Building Apps with AWS gets you acquainted with an ever-expanding toolkit for mobile app development.

description

Web service technologies are redefining the way that large and small companies are doing business and exchanging information. Due to the critical need for furthering automation, engagement, and efficiency, systems and workflows are becoming increasingly more web-based. Web Services: Concepts, Methodologies, Tools, and Applications is an innovative reference source that examines relevant theoretical frameworks, current practice guidelines, industry standards and standardization, and the latest empirical research findings in web services. Highlighting a

range of topics such as cloud computing, quality of service, and semantic web, this multi-volume book is designed for computer engineers, IT specialists, software designers, professionals, researchers, and upper-level students interested in web services architecture, frameworks, and security.

Host Your Web Site On The Cloud is your step-by-step guide to this revolutionary approach to hosting and managing your web applications. Cloud computing gives you the tools you need to prepare and cope with a traffic onslaught. You'll have the confidence to withstand a traffic surge without melting your servers or sending you into bankruptcy. There are a number of ways to use the cloud to host existing applications, build creative new ones, and improve the cost-effectiveness and efficiency of organizations large and small. You'll learn how to: gain a thorough understanding of cloud computing master the fundamentals of Amazon Web Services install and configure visual and command line tools store, retrieve, and distribute data quickly and easily build applications that scale manage the monitoring, load balancing, and scaling capabilities of cloud computing As a developer, you need room & flexibility to be innovative. Why waste time worrying about the technical aspects of server capacity? AWS handles security, load balancing, and server resources virtually so you're not restricted to one physical server.

The two volumes IFIP AICT 478 and 479 constitute the refereed post-conference proceedings of the 9th IFIP WG 5.14 International Conference on Computer and Computing Technologies in Agriculture, CCTA 2015, held in Beijing, China, in September 2015. The 122 revised papers included in this volume were carefully selected from 237 submissions. They cover a wide range of interesting theories and applications of information technology in agriculture, including intelligent sensing, monitoring and automatic control technology; key technology and models of the Internet of things; intelligent technology for agricultural equipment; computer vision; computer graphics and virtual reality; computer simulation, optimization and modeling; cloud computing and agricultural applications; agricultural big data; decision support systems and expert systems; 3s technology and precision agriculture; quality and safety of agricultural products; detection and tracing technology; and agricultural electronic commerce technology.

Programming Amazon Web Services S3, EC2, SQS, FPS, and SimpleDB"O'Reilly Media, Inc."

The Practical, Foundational Technical Introduction to the World's #1 Cloud Platform Includes access to several hours of online training video: Mark Wilkins' expert training video library guides you through setting up core services and prepares you to deploy your own apps and resources. Learning Amazon Web Services (AWS) is the perfect foundational resource for all administrators, developers, project managers, and other IT professionals who want to plan and deploy AWS services and/or earn AWS certification. Top cloud trainer and evangelist Mark Wilkins teaches best practices that align with Amazon's Well-Architected Framework, introduces key concepts in the context of a running case study, carefully explains how core AWS services operate and integrate, and offers extensively tested tips for maximizing flexibility, security, and value. Companion online videos guide you step-by-step through setting AWS compute, storage, networking, scale, security, automation, and more. Balance cost, compliance, and latency in your service designs Choose the right networking options for your virtual private cloud (VPC) Build, host, launch, manage, and budget for EC2 compute services Plan for scale and resiliency, and make informed decisions about AWS storage

Enforce strict security, and automate to improve operational efficiency This book with companion training videos is a valuable learning tool for anyone seeking to demonstrate expertise through formal certification. WEB EDITION: All buyers of the book or ebook can register your book for access to a free online Web Edition of this title, which included videos embedded within the text, plus updates as they become available.

Pro Python System Administration, Second Edition explains and shows how to apply Python scripting in practice. It will show you how to approach and resolve real-world issues that most system administrators will come across in their careers. This book has been updated using Python 2.7 and Python 3 where appropriate. It also uses various new and relevant open source projects and tools that should now be used in practice. In this updated edition, you will find several projects in the categories of network administration, web server administration, and monitoring and database management. In each project, the author will define the problem, design the solution, and go through the more interesting implementation steps. Each project is accompanied by the source code of a fully working prototype, which you'll be able to use immediately or adapt to your requirements and environment. This book is primarily aimed at experienced system administrators whose day-to-day tasks involve looking after and managing small-to-medium-sized server estates. It will also be beneficial for system administrators who want to learn more about automation and want to apply their Python knowledge to solve various system administration problems. Python developers will also benefit from reading this book, especially if they are involved in developing automation and management tools.

If you plan to use Amazon Web Services to run applications in the cloud, the end-to-end approach in this book will save you needless trial and error. You'll find practical guidelines for designing and building applications with Amazon Elastic Compute Cloud (EC2) and a host of supporting AWS tools, with a focus on critical issues such as load balancing, monitoring, and automation. How do you move an existing application to AWS, or design your application so that it scales effectively? How much storage will you require? Programming Amazon EC2 not only helps you get started, it will also keep you going once you're successfully positioned in the cloud. This book is a must-read for application architects, developers, and administrators. Determine your application's lifecycle and identify the AWS tools you need Learn how to build and run your application as part of the development process Migrate simple web applications to the cloud with EC2, Amazon Simple Storage Service, and CloudFront content delivery Meet traffic demand with EC2's Auto Scaling and Elastic Load Balancing Decouple your application using Simple Queue Service, Simple Notification Service, and other tools Use the right tools to minimize downtime, improve uptime, and manage your decoupled system "Jurg and Flavia have done a great job in this book building a practical guide on how to build real systems using AWS." --Werner Vogels, VP & CTO at Amazon.com

Discover practical techniques to build cloud-native apps that are scalable, reliable, and always available. Key Features Build well-designed and secure microservices. Enrich your microservices with continuous integration and monitoring. Containerize your application with Docker Deploy your application to AWS. Learn how to utilize the powerful AWS services from within your application Book Description Awarded as one of the best books of all time by BookAuthority, Cloud Native Programming with

Golang will take you on a journey into the world of microservices and cloud computing with the help of Go. Cloud computing and microservices are two very important concepts in modern software architecture. They represent key skills that ambitious software engineers need to acquire in order to design and build software applications capable of performing and scaling. Go is a modern cross-platform programming language that is very powerful yet simple; it is an excellent choice for microservices and cloud applications. Go is gaining more and more popularity, and becoming a very attractive skill. This book starts by covering the software architectural patterns of cloud applications, as well as practical concepts regarding how to scale, distribute, and deploy those applications. You will also learn how to build a JavaScript-based front-end for your application, using TypeScript and React. From there, we dive into commercial cloud offerings by covering AWS. Finally, we conclude our book by providing some overviews of other concepts and technologies that you can explore, to move from where the book leaves off. What you will learn

- Understand modern software applications architectures
- Build secure microservices that can effectively communicate with other services
- Get to know about event-driven architectures by diving into message queues such as Kafka, Rabbitmq, and AWS SQS.
- Understand key modern database technologies such as MongoDB, and Amazon's DynamoDB
- Leverage the power of containers
- Explore Amazon cloud services fundamentals
- Know how to utilize the power of the Go language to access key services in the Amazon cloud such as S3, SQS, DynamoDB and more.
- Build front-end applications using ReactJS with Go
- Implement CD for modern applications

Who this book is for This book is for developers who want to begin building secure, resilient, robust, and scalable Go applications that are cloud native. Some knowledge of the Go programming language should be sufficient. To build the front-end application, you will also need some knowledge of JavaScript programming.

Amazon Simple Storage Service is storage for the Internet. It is designed to make web-scale computing easier for developers. Amazon S3 has a simple web services interface that you can use to store and retrieve any amount of data, at any time, from anywhere on the web. It gives any developer access to the same highly scalable, reliable, fast, inexpensive data storage infrastructure that Amazon uses to run its own global network of web sites. The service aims to maximize benefits of scale and to pass those benefits on to developers. This guide explains the core concepts of Amazon S3, such as buckets and objects, and how to work with these resources using the Amazon S3 application programming interface (API).

With the increasing global interest in leveraging cloud infrastructure, AWS Cloud from Amazon offers a cutting-edge platform for architecting, building, and deploying web-scale cloud applications. The variety of features available within AWS can reduce overall infrastructure costs and accelerate the development process for both large enterprises and startups alike. Beginning with basic cloud concepts, you'll learn about the various cloud services models and the design implications of multi-tenant applications. You'll then design, implement, and deploy a multi-tier, scalable, highly-available and secure application on the AWS platform. At every step, we explain the key guiding principles driving real-world production-ready application architectures. Finally, you will learn how to automate your cloud infrastructure, set up operations, application monitoring, and DevOps pipeline.

Building on the success of its storefront and fulfillment services, Amazon now allows businesses to "rent" computing power, data

storage and bandwidth on its vast network platform. This book demonstrates how developers working with small- to mid-sized companies can take advantage of Amazon Web Services (AWS) such as the Simple Storage Service (S3), Elastic Compute Cloud (EC2), Simple Queue Service (SQS), Flexible Payments Service (FPS), and SimpleDB to build web-scale business applications. With AWS, Amazon offers a new paradigm for IT infrastructure: use what you need, as you need it, and pay as you go.

Programming Amazon Web Services explains how you can access Amazon's open APIs to store and run applications, rather than spend precious time and resources building your own. With this book, you'll learn all the technical details you need to: Store and retrieve any amount of data using application servers, unlimited data storage, and bandwidth with the Amazon S3 service Buy computing time using Amazon EC2's interface to requisition machines, load them with an application environment, manage access permissions, and run your image using as many or few systems as needed Use Amazon's web-scale messaging infrastructure to store messages as they travel between computers with Amazon SQS Leverage the Amazon FPS service to structure payment instructions and allow the movement of money between any two entities, humans or computers Create and store multiple data sets, query your data easily, and return the results using Amazon SimpleDB. Scale up or down at a moment's notice, using these services to employ as much time and space as you need Whether you're starting a new online business, need to ramp up existing services, or require an offsite backup for your home, Programming Amazon Web Services gives you the background and the practical knowledge you need to start using AWS. Other books explain how to build web services. This book teaches businesses how to take make use of existing services from an established technology leader.

If you intend to use Amazon Web Services (AWS) for remote computing and storage, Python is an ideal programming language for developing applications and controlling your cloud-based infrastructure. This cookbook gets you started with more than two dozen recipes for using Python with AWS, based on the author's boto library. You'll find detailed recipes for working with the S3 storage service as well as EC2, the service that lets you design and build cloud applications. Each recipe includes a code solution you can use immediately, along with a discussion of why and how the recipe works. You also get detailed advice for using boto with AWS and other cloud services. This book's recipes include methods to help you: Launch instances on EC2, and keep track of them with tags Associate an Elastic IP address with an instance Restore a failed Elastic Block Store volume from a snapshot Store and monitor your own custom metrics in CloudWatch Create a bucket in S3 to contain your data objects Reduce the cost of storing noncritical data Prevent accidental deletion of data in S3

This book features selected research papers presented at the International Conference on Evolutionary Computing and Mobile Sustainable Networks (ICECMSN 2020), held at the Sir M. Visvesvaraya Institute of Technology on 20–21 February 2020.

Discussing advances in evolutionary computing technologies, including swarm intelligence algorithms and other evolutionary algorithm paradigms which are emerging as widely accepted descriptors for mobile sustainable networks virtualization, optimization and automation, this book is a valuable resource for researchers in the field of evolutionary computing and mobile sustainable networks.

With platforms designed for rapid adaptation and failure recovery such as Amazon Web Services, cloud computing is more like programming than traditional system administration. Tools for automatic scaling and instance replacement allow even small DevOps teams to manage massively scalable application infrastructures—if team members drop their old views of development and operations and start mastering automation. This comprehensive guide shows developers and system administrators how to configure and manage AWS services including EC2, CloudFormation, Elastic Load Balancing, S3, and Route 53. Sysadms will learn will learn to automate their favorite tools and processes; developers will pick up enough ops knowledge to build a robust and resilient AWS application infrastructure. Launch instances with EC2 or CloudFormation Securely deploy and manage your applications with AWS tools Learn to automate AWS configuration management with Python and Puppet Deploy applications with Auto Scaling and Elastic Load Balancing Explore approaches for deploying application and infrastructure updates Save time on development and operations with reusable components Learn strategies for managing log files in AWS environments Configure a cloud-aware DNS service with Route 53 Use AWS CloudWatch to monitor your infrastructure and applications Easily get your head in the Cloud with Amazon Web Services With Amazon Web Services (AWS), you can do everything from backing up your personal hard drive to creating a full-fledged IT department in the Cloud. And while major corporations like Adobe and Netflix have turned to AWS for their Cloud computing needs, it isn't just for private companies. Amazon Web Services For Dummies is the singular resource that shows real people with real businesses how to use on-demand IT resources to help their companies grow. If you're like most people just getting their feet wet with this service, your first question is likely to be, "How do I get started with AWS?" This book answers that question—and a multitude more—in language you can understand and shows you how to put this Cloud computing service to work for you right away. AWS is immense and, naturally, intimidating, but with the help of this book, you'll peel back its many layers in no time! Provides overviews that explain what tasks the services perform and how they relate to each other Offers specific paths to follow in order to obtain a particular installation result Gets you started without making a huge investment Reduces the risk of failure by ensuring you understand available options as part of the configuration and usage process Stop wasting time and resources on hardware and software that's quickly outdated. Get started with AWS today!

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