

## Cloud Foundry The Definitive By Duncan C E Winn

**Deployment and scale applications on Cloud Foundry About This Book Gain hands-on experience using Cloud Foundry Implement deployment, management and scaling of applications on Cloud Foundry Learn best practices and troubleshooting tips for running applications on Cloud Foundry Who This Book Is For This book is aimed at developers, engineers and architects who want to learn key aspects of developing and running applications on the Cloud Foundry Platform. Prior knowledge Cloud Foundry is not necessary. What You Will Learn Understand Cloud Foundry (CF) tools and concepts. Understand the breadth of possibilities unleashed through a lightweight agile approach to building and deploying applications. Design and deploy cloud native applications that run well on Cloud Foundry. Learn Microservice design concepts and worker applications. Customize service brokers to publish your services in the Cloud Foundry marketplace. Using, managing and creating buildpacks for the Cloud Foundry Platform. Troubleshoot applications on Cloud Foundry Perform zero-downtime deployments using blue/green routes, A/B testing, and painless rollbacks to earlier versions of the application. In Detail Cloud Foundry is the open source platform to deploy, run, and scale applications. Cloud Foundry is growing rapidly and a leading product that provides PaaS (Platform as a Service) capabilities to enterprise, government, and organizations around the globe. Giants like Dell Technologies, GE, IBM, HP and the US government are using Cloud Foundry innovate faster in a rapidly changing world. Cloud Foundry is a developer's dream. Enabling them to create modern applications that can leverage the latest thinking, techniques and capabilities of the cloud, including: DevOps Application Virtualization Infrastructure agnosticism Orchestrated containers Automation Zero downtime upgrades A/B deployment Quickly scaling applications out or In This book takes readers on a journey where they will first learn the Cloud Foundry basics, including how to deploy and scale a simple application in seconds. Readers will build their knowledge of how to create highly scalable and resilient cloud-native applications and microservices running on Cloud Foundry. Readers will learn how to integrate their application with services provided by Cloud Foundry and with those external to Cloud Foundry. Readers will learn how to structure their Cloud Foundry environment with orgs and spaces. After that, we'll discuss aspects of continuous integration/continuous delivery (CI/CD), monitoring and logging. Readers will also learn how to enable health checks, troubleshoot and debug applications. By the end of this book, readers will have hands-on experience in performing various deployment and scaling tasks. Additionally, they will have an understanding of what it takes to migrate and develop applications for Cloud Foundry. Style and Approach A practitioner's guide to Cloud Foundry that covers the areas of application development, deployment and services.**

**How can Cloud Foundry help you develop and deploy business-critical applications and tasks with velocity? This practical guide demonstrates how this open source cloud-native application platform not only significantly reduces the develop-to-deploy cycle time, but also raises the value line for application operators by changing the way applications and supporting services are deployed and run. Learn how Cloud Foundry can help you improve your product velocity by handling many of essential tasks required to run applications in production. Author Duncan Winn shows DevOps and operations teams how to configure and run Cloud Foundry at scale. You'll examine Cloud Foundry's technical concepts—including how various platform components interrelate—and learn how to choose your underlying infrastructure, define the networking architecture, and establish resiliency requirements. This book covers: Cloud-native concepts that make the app build, test, deploy, and scale faster How to deploy Cloud Foundry and the BOSH release engineering toolchain Concepts and components of Cloud Foundry's runtime architecture Cloud Foundry's routing mechanisms and capabilities The platform's approach to container tooling and orchestration BOSH concepts, deployments, components, and commands Basic tools and techniques for debugging the platform Recent and soon-to-merge features of Cloud Foundry**

**4+ Hours of Video Instruction Learn now to develop, deploy, and manage applications on Cloud Foundry. Overview Cloud Foundry LiveLessons provides an introduction to the Cloud Foundry platform. The 11 lessons introduce fundamentals concepts, principles and best practices in Cloud Foundry and cloud-native architecture. You use Cloud Foundry to develop on a public-cloud, deploy and manage applications, integrate with back-services, interact with the Cloud Foundry API, extend the platform with service-brokers, and extend the platform with route-services. About the Instructors Josh Long, Spring Developer Advocate at Pivotal and Java Champion, is a lead author, or co-author, on five books on Spring for Apress and O'Reilly, a frequent speaker at conferences worldwide, a JavaOne rockstar, and also the instructor on three Spring LiveLessons videos. He is a contributor to various Spring projects (including Spring Boot) and an all-around Spring fan. When he's not hacking on code for SpringSource, he can be found at the local Java User Group or at the local coffee shop. Josh likes solutions that push the boundaries of the technologies that enable them. His interests include scalability, BPM, grid-processing, mobile computing, and so-called "smart" systems. He blogs at spring.io/blog or joshlong.com. You can follow Josh on Twitter starbuxman. Josh McKenty , VP Global Ecosystem Engineering at Pivota is an entrepreneur and technologist who works with Fortune 100 customers that seek to transition to a cloud native architecture and, with Pivotal's Cloud Foundry team, to bring new features and functionality to Cloud Foundry-based products, the industry-standard enterprise platform for the cloud era. A San Francisco Business Times 40-Under-40 Leader and NASA Ames Honor Award recipient, McKenty has been instrumental in defining and bringing cloud solutions to market. He co-founded OpenStack, the definitive open cloud solution for infrastructure-as-a-Service, and Piston (acquired by Cisco), which provides OpenStack-based private cloud solutions for marquee enterprises across industries. As the founding Chief Architect, McKenty led the development of NASA Nebula, the federal government's first cloud computing platform. Skill Level Intermediate to advanced developer Learn How To Orchestrate VMs and containers Get Cloud Foundry Use multi-tenancy Install Cloud Foundry on Google Cloud Platform, Microsoft Azure, or Amazon Web Services (AWS) Using Cloud Foundry Contro...**

**In the beginning, there was wreckage. Dane Perry's mother was dead, and the father who always said he'd amount to nothing blamed him. Dane swore he'd become something. He would be someone.In the middle, there was escape. Rebuilding his life from the ashes of his mother's memory, Dane found success as a respected surgeon, and love in the form of Craig Dahl, a talented artist who became his everything. But there was also darkness, lies, and a crumbling foundation just waiting for the ground to shift.In the end, there was a spectacular fall, illusions shattered, and for Dane, nothing more to lose. He was broken, damaged, and left with fierce demons. But from the bottom, the only way left is up. Dane renewed friendships and salvaged his career. The only thing he cannot replace is Craig. But Dane has a plan. Brick by brick, his foundation is rebuilt, and all he needs is for Craig to listen one last time. In the beginning again, there's hope and tatters of love. Can Dane repair the damage with Craig? Can he rescue the only thing he amounted to that ever truly mattered?This book contains vivid descriptions of symptoms of PTSD and events that can cause anxiety. Reader discretion advised.**

**Learning Amazon Web Services (AWS)**

**The Last Samurai**

**Cloud Foundry: The Definitive Guide**

**Modern Finite Batch Processing in the Cloud**

**Hybrid Cloud Data and API Integration: Integrate Your Enterprise and Cloud with Bluemix Integration Services**

**Solutions and Examples for Java Developers**

**American Car & Foundry Company**

**This Manual is intended primarily for use by foundry personnel aboard repair ships and tenders. The recommended practices are based on procedures proved workable under Navy conditions and are supplemented by information from industrial sources. The Manual is divided into two general sections. The first section, chapters 1 through 13, contains information of a general nature, such as "How Metals Solidify," "Designing a Casting," "Sands for Molds and Cores," "Gates, Risers, and Chills," and "Description and Operation of Melting Furnaces." Subjects covered in these chapters are generally applicable to all of the metals that may be cast aboard ship. The second section, chapters 14 through 21, contains information on specific types of alloys, such as "Copper-Base Alloys," "Aluminum-Base Alloys," "Cast Iron," and "Steel." Specific melting practices, suggestions for sand mixes, molding practices, gating, and risering are covered in these chapters. This manual has been written with the "how-to-do-it" idea as the principal aim. Discussions as to the "why" of certain procedures have been kept to a minimum. This manual contains information that should result in the production of consistently better castings by repair ship personnel.**

**Winner - CMI Management Book of the Year 2017 - Practical Manager category Master the art of negotiation and gain the competitive advantage Now revised and updated, the second edition of The Negotiation Book will teach you about one of the most important skills in business. We all have to negotiate at some point; whether in the office or at home and good negotiation skills can have a profound effect on our lives - both financially and personally. No other skill will give you a better chance of optimizing your success and your organization's success. Every time you negotiate, you are looking for an increased advantage. This book delivers it, whilst ensuring the other party also comes away feeling good about the deal. Nothing will put you in a stronger position to build capacity, build negotiation strategies and facilitate negotiations through to successful conclusions. The Negotiation Book: Explains the importance of planning, dynamics and strategies Will help you understand the psychology, tactics and behaviours of negotiation Teaches you how to conduct successful win-win negotiations Gives you the competitive advantage**

**Software development today is embracing events and streaming data, which optimizes not only how technology interacts but also how businesses integrate with one another to meet customer needs. This phenomenon, called flow, consists of patterns and standards that determine which activity and related data is communicated between parties over the internet. This book explores critical implications of that evolution: What happens when events and data streams help you discover new activity sources to enhance existing businesses or drive new markets? What technologies and architectural patterns can position your company for opportunities enabled by flow? James Uruhart, global field CTO at VMware, guides enterprise architects, software developers, and product managers through the process. Learn the benefits of flow dynamics when businesses, governments, and other institutions integrate via events and data streams Understand the value chain for flow integration through Wardley mapping visualization and promise**

**While Robotic Process Automation (RPA) has been around for about 20 years, it has hit an inflection point because of the convergence of cloud computing, big data and AI. This book shows you how to leverage RPA effectively in your company to automate repetitive and rules-based processes, such as scheduling, inputting/transferring data, cut and paste, filling out forms, and search. Using practical aspects of implementing the technology (based on case studies and industry best practices), you'll see how companies have been able to realize substantial ROI (Return On Investment) with their implementations, such as by lessening the need for hiring or outsourcing. By understanding the core concepts of RPA, you'll also see that the technology significantly increases compliance - leading to fewer issues with regulations - and minimizes costly errors. RPA software revenues have recently soared by over 60 percent, which is the fastest ramp in the tech industry, and they are expected to exceed \$1 billion by the end of 2019. It is generally seamless with legacy IT environments, making it easier for companies to pursue a strategy of digital transformation and can even be a gateway to AI. The Robotic Process Automation Handbook puts everything you need to know into one place to be a part of this wave. What You'll Learn Develop the right strategy and plan Deal with resistance and fears from employees Take an in-depth look at the leading RPA systems, including where they are most effective, the risks and the costs Evaluate an RPA system Who This Book Is For IT specialists and managers at mid-to-large companies**

**Cloud Foundry LiveLessons Video Training**

**Deploy, manage, and orchestrate cloud-native applications with ease**

**Microservices From Theory to Practice: Creating Applications in IBM Bluemix Using the Microservices Approach**

**A Visual Guide to a Galaxy Far, Far Away**

**Mastering Private Equity**

**Cloud Foundry for Developers**

**A History, a Theory, a Flood**

What exactly is a cloud-native platform? It's certainly a hot topic in IT, as enterprises today assess this option for developing and delivering software quickly and repeatedly. This O'Reilly report explains the capabilities of cloud-native platforms and examines the fundamental changes enterprises need to make in process, organization, and culture if they're to take real advantage of this approach. Author Duncan Winn focuses on the open source platform Cloud Foundry, one of the more prominent cloud-native providers. You'll learn how cloud-native applications are designed to be "infrastructure unaware" so they can thrive and move at will in the highly distributed and constantly evolving cloud environment. With this report, you'll explore: Technical driving forces that are rapidly changing the way organizations develop and deliver software today How key concepts underpinning the Cloud Foundry platform leverage each of the technical forces discussed How cloud-native platforms remove the requirement to perform undifferentiated heavy lifting, such as provisioning VMs, middleware, and databases Why cloud-native platforms enable fast feedback loops as you move from agile development to agile deployment Recommended changes and practical considerations for organizations that want to build cloud-native applications

Microservices have many advantages: Efficiently implementing more features, bringing software into production faster, robustness and easy scalability are among them. But implementing a microservices architecture and selecting the necessary technologies are difficult challenges. This book shows microservices recipes that architects can customize and combine into a microservices menu. In this way, the implementation of microservices can be individually adapted to the requirements of the project. Eberhard Wolff introduces microservices, self-contained systems, micro- and macro-architecture and the migration to microservices. The second part shows the microservices recipes: Basic technologies such as Docker or PaaS, frontend integration with links, JavaScript or ESI (Edge Side Includes). This is followed by asynchronous microservices with Apache Kafka or REST / Atom. In the synchronous approaches, the book discusses REST with the Netflix stack, Consul, PaaS with Cloud Foundry, and Kubernetes. Finally, operations is discussed: Log Analysis with Elasticsearch and Kibana, Monitoring with Prometheus, and tracing with Zipkin. For each recipe there are suggestions for variations and combinations. Readers can experience all technologies hands-on with a demo project on GitHub. The outlook picks up on the operation of microservices and also shows how the reader can start with microservices in concrete terms. The book provides the technical tools to implement a microservices architecture. Demo projects and suggestions for self-study will complete the book.

Craigie's study on the Book of Deuteronomy is part of The New International Commentary on the Old Testament. Like its companion series on the New Testament, this commentary devotes considerable care to achieving a balance between technical information and homiletic-devotional interpretation.

The dramatic arc of Saigo Takamori's life, from his humble origins as a lowly samurai, to national leadership, to his death as a rebel leader, has captivated generations of Japanese readers and now Americans as well - his life is the inspiration for a major Hollywood film, The Last Samurai, starring Tom Cruise and Ken Watanabe. In this vibrant new biography, Mark Ravina, professor of history and Director of East Asian Studies at Emory University, explores the facts behind Hollywood storytelling and Japanese legends, and explains the passion and poignancy of Saigo's life. Known both for his scholarly research and his appearances on The History Channel, Ravina recreates the world in which Saigo lived and died, the last days of the samurai. The Last Samurai traces Saigo's life from his early days as a tax clerk in far southwestern Japan, through his rise to national prominence as a fierce imperial loyalist. Saigo was twice exiled for his political activities -- sent to Japan's remote southwestern islands where he fully expected to die. But exile only increased his reputation for loyalty, and in 1864 he was brought back to the capital to help his lord fight for the restoration of the emperor. In 1868, Saigo commanded his lord's forces in the battles which toppled the shogunate and he became a leader in the emperor Meiji's new government. But Saigo found only anguish in national leadership. He understood the need for a modern conscript army but longed for the days of the traditional warrior. Saigo hoped to die in service to the emperor. In 1873, he sought appointment as envoy to Korea, where he planned to demand that the Korean king show deference to the Japanese emperor, drawing his sword, if necessary, to defend imperial honor. Denied this chance to show his courage and loyalty, he retreated to his homeland and spent his last years as a schoolteacher, training samurai boys in frugality, honesty, and courage. In 1876, when the government stripped samurai of their swords, Saigo's followers rose in rebellion and Saigo became their reluctant leader. His insurrection became the bloodiest war Japan had seen in centuries, killing over 12,000 men on both sides and nearly bankrupting the new imperial government. The imperial government denounced Saigo as a rebel and a traitor, but their propaganda did not overcome his fame and in 1889, twelve years after his death, the government relented, pardoned Saigo of all crimes, and posthumously restored him to imperial court rank. In THE LAST SAMURAI, Saigo is as compelling a character as Robert E. Lee was to Americans-a great and noble warrior who followed the dictates of honor and loyalty, even though it meant civil war in a country to which he'd devoted his life. Saigo's life is a fascinating look into Japanese feudal society and a history of a country as it struggled between its long traditions and the dictates of a modern future.

**Learning HTTP/2**

**Foundry Manual**

**Four Wars Super Graphic**

**The Definitive Guide to SUSE Linux Enterprise Server 12**

**Microservices Patterns**

**The Robotic Process Automation Handbook**

**Building Blocks for IoT Analytics**

Internet-of-Things (IoT) Analytics are an integral element of most IoT applications, as it provides the means to extract knowledge, drive active services and optimize decision making. IoT analytics will be a major contributor to IoT business value in the coming years, as it will enable organizations to process and fully leverage large amounts of IoT data, which are nowadays largely underutilized. The Building Blocks of IoT Analytics is devoted to the presentation the main technology building blocks that comprise advanced IoT analytics systems. It introduces IoT analytics as a special case of BigData analytics and accordingly presents leading edge technologies that can be deployed in order to successfully confront the main challenges of IoT Analytics applications. Special emphasis is paid in the presentation of technologies for IoT streaming and semantic interoperability across diverse IoT streams. Furthermore, the role of cloud computing and BigData technologies in IoT analytics are presented, along with practical tools for implementing, deploying and operating non-trivial IoT applications. Along with the main building blocks of IoT analytics systems and applications, the book presents a series of practical applications, which illustrate the use of these technologies in the scope of pragmatic applications. Technical topics discussed in the book include: Cloud Computing and BigData for IoT analyticsSearching the Internet of ThingsDevelopment Tools for IoT Analytics ApplicationsIoT Analytics-as-a-ServiceSemantic Modelling and Reasoning for IoT AnalyticsIoT analytics for Smart BuildingsIoT analytics for Smart CitiesOperationalization of IoT analyticsEthical aspects of IoT analytics This book contains both research oriented and applied articles on IoT analytics, including several articles reflecting work undertaken in the scope of recent European Commission funded projects in the scope of the FP7 and H2020 programmes. These articles present results of these projects on IoT analytics platforms and applications. Even though several articles have been contributed by different authors, they are structured in a well thought order that facilitates the reader either to follow the evolution of the book or to focus on specific topics depending on his/her background and interest in IoT and IoT analytics technologies. The compilation of these articles in this edited volume has been largely motivated by the close collaboration of the co-authors in the scope of working groups and IoT events organized by the Internet-of-Things Research Cluster (IERC), which is currently a part of EU's Alliance for Internet of Things Innovation (AIOTI).

IBM® Hybrid Integration Services is a set of hybrid cloud capabilities in IBM Bluemix™ T that allows businesses to innovate rapidly while, at the same time, providing IT control and visibility. It allows customers to quickly and easily build and operate systems that mix data and application programming interfaces (APIs) from a wide variety of sources, whether they reside on-premises or in the cloud. In many cases, you want to expose your IT assets from your private cloud as APIs and at the same time have best overall manageability and control of who uses your assets and how. Bluemix provides a set of services such as Secure Gateway, API Management, Connect and Compose, DataWorks, and API Catalog, which enable Hybrid Cloud Integration capabilities. This IBM Redbooks® publication provides preferred practices around developing cloud solutions using these Hybrid Integration Services that help you maintain data consistency, manageability, and security for critical transactions. From the bestselling author of the acclaimed Chaos and Genius comes a thoughtful and provocative exploration of the big ideas of the modern era: Information, communication, and information theory. Acclaimed science writer James Gleick presents an eye-opening vision of how our relationship to information has transformed the very nature of human consciousness. A fascinating intellectual journey through the history of communication and information, from the language of Africa "s" talking drums to the invention of writing alphabets; from the electronic transmission of code to the origins of information theory, into the new information age and the current deluge of news, tweets, images, and blogs. Along the way, Gleick profiles key innovators, including Charles Babbage, Ada Lovelace, Samuel Morse, and Claude Shannon, and reveals how our understanding of information is transforming not only how we look at the world, but how we live. A New York Times Notable Book A Los Angeles Times and Cleveland Plain Dealer Best Book of the Year Winner of the PEN/E. O. Wilson Literary Science Writing Award

Big data is currently one of the most critical emerging technologies. Organizations around the world are looking to exploit the explosive growth of data to unlock previously hidden insights in the context of creating new revenue streams, gaining operational efficiencies, and obtaining greater understanding of customer needs. It is important to think of big data and analytics together. Big data is the term used to describe the recent explosion of different types of data from disparate sources. Analytics is about examining data to derive interesting and relevant trends and patterns, which can be used to inform decisions, optimize processes, and even drive new business models. With today's deluge of data comes the problems of processing that data, obtaining the correct skills to manage and analyze that data, and establishing rules to govern the data's use and distribution. The big data technology stack is ever growing and sometimes confusing, even more so when we add the complexities of setting up big data environments with large up-front investments. Cloud computing seems to be a perfect vehicle for hosting big data workflows. However, working on big data in the cloud brings its own challenge of reconciling two contradictory design principles. Cloud computing is based on the concepts of consolidation and resource pooling, but big data systems (such as Hadoop) are built on the shared nothing principle, where each node is independent and self-sufficient. A solution architecture that can allow these mutually exclusive principles to coexist is required to truly exploit the elasticity and ease-of-use of cloud computing for big data environments. This IBM® Redpaper™ publication is aimed at chief architects, line-of-business executives, and CIOs to provide an understanding of the cloud-related challenges they face and give prescriptive guidance for how to realize the benefits of big data solutions quickly and cost-effectively.

**Spark: The Definitive Guide**

**Microservices**

**The Definitive Guide to Spring Batch**

**The Negotiation Book**

**The Soho Manufactory, Mint and Foundry, West Midlands**

**Bavnick**

**IBM Technical Computing Clouds**

**For web developers and other programmers interested in using JavaScript, this bestselling book provides the most comprehensive JavaScript material on the market. The seventh edition represents a significant update, with new information for ECMAScript 2020, and new chapters on language-specific features. JavaScript: The Definitive Guide is ideal for experienced programmers who want to learn the programming language of the web, and for current JavaScript programmers who want to master it.**

**From lambda expressions and JavaFX 8 to new support for network programming and mobile development, Java 8 brings a wealth of changes. This cookbook helps you get up to speed right away with hundreds of hands-on recipes across a broad range of Java topics. You'll learn useful techniques for everything from debugging and data structures to GUI development and functional programming. Each recipe includes self-contained code solutions that you can freely use, along with a discussion of how and why they work. If you are familiar with Java basics, this cookbook will bolster your knowledge of the language in general and Java 8's main APIs in particular. Recipes include: Methods for compiling, running, and debugging Manipulating, comparing, and rearranging text Regular expressions for string- and pattern-matching Handling numbers, dates, and times Structuring data with collections, arrays, and other types Object-oriented and functional programming techniques Directory and filesystem operations Working with graphics, audio, and video GUI development, including JavaFX and handlers Network programming on both client and server Database access, using JPA, Hibernate, and JDBC Processing JSON and XML for data storage**

**Multitasking and concurrency**

**This IBM® Redbooks® publication highlights IBM Technical Computing as a flexible infrastructure for clients looking to reduce capital and operational expenditures, optimize energy usage, or re-use the infrastructure. This book strengthens IBM SmartCloud® solutions, in particular IBM Technical Computing clouds, with a well-defined and documented deployment model within an IBM System x® or an IBM Flex System™. This provides clients with a cost-effective, highly scalable, robust solution with a planned foundation for scaling, capacity, resilience, optimization, automation, and monitoring. This book is targeted toward technical professionals (consultants, technical support staff, IT Architects, and IT Specialists) responsible for providing cloud-computing solutions and support.**

**The Definitive Guide to SUSE Linux Enterprise Server 12 is a task-oriented book designed for self-study as well as classroom environments, which will also serve you as a reference guide. The book covers all skills that system administrators typically need to possess to administer SUSE Linux Enterprise Server in corporate environments. It starts at the beginning, which makes The Definitive Guide to SUSE Linux Enterprise Server 12 suitable for people without any preliminary Linux knowledge, and yet works up to advanced SUSE Linux administration tasks, such as building a cluster, optimizing performance or managing SUSE Linux Enterprise Server with SUSE Manager. The Definitive Guide to SUSE Linux Enterprise Server 12 is an ideal reference guide for system administrators, but is also perfect as a study book to prepare for the CLA.**

**As well as the book, this book also contains step-by-step exercises, then scenario based exercises, and reading getting familiar with the subjects that are required to pass these three exams. The Definitive Guide to SUSE Linux Enterprise Server 12 also contains test exams, so you can use it as a study guide in a formal learning environment or as a book that you can learn and test your own progress with. You master SUSE Linux Enterprise Server. You'll learn everything you need to know and the skills you need to manage SUSE Linux Enterprise Servers. From installing a secure server, to performing the day-to-day management tasks on SUSE Linux Enterprise Server. Along the way you'll encounter and master SUSE Linux Enterprise Server in a data center environment, how to manage your SUSE Enterprise Server for High Availability, and you'll see how to manage your SUSE Linux Enterprise Server with SUSE Manager. From installation to expert management. The Definitive Guide to SUSE Linux Enterprise Server 12 will show you the ways to succeed with Linux Enterprise Server 12.**

**The Definitive Guide**

**With examples in Java**

**A Critical Biography**

**Flow Architectures**

**Innovation and Interdisciplinary Solutions for Underserved Areas**

**Big Data Processing Made Simple**

**Swift in the Cloud**

**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.**

**TKO Studios presents "Scales & Scoundrels" (Book 1 of 2) by Sebastian Girner It's hard to make an honest living in a land brimming with magic and mystery, and treasure hunter Luwander is tired of being a penniless adventurer. Ever in search of gold and glory, she sets off for a fabled dungeon "the Dragon's Maw", an ancient labyrinth, at the bottom of which slumber endless wealth...or certain doom! A loner by trade, Luwander is forced to team up with a team of scraggly adventurers, each hoping to find a treasure of their own in the forbidden tombs of the Scarlet Sands Empire, anxious for first taste of adventure yet blind to the consequences. His royal Shadow and bodyguard, Koro, whose very honor hangs in the balance of her prince's success. And Derma Iron, a stocky young dwarf whose journey will take her deeper into the darkness than she ever wished to tread. For these scruffy heroes, what starts out as a road to riches becomes the first step on an epic journey to destiny, for Luwander holds a secret in her heart that will shatter the chains of fate, and bring light to a world enshrouded upon by an ancient darkness. Scales & Scoundrels is an innovative Graphic Novel (two volumes). Book 2 continues the adventure as Luwander sets off to find a way to break the chains of her cursed fate. Undeterred by danger, she travels to the frozen northern wastes of the Spine of Winter, to a reclusive monastery whose monks guard a secret entrance to the Dragon Dream, the shared plane of consciousness of all Urden, living or long passed. What she finds there will set her on a journey beyond where any mortals, and few dragons have tread, to uncover an ancient secret from the darkest corners of history. Continuing the epic journey of the cursed dragon princess and her fellow scoundrels in a world bent on undoing itself: If you enjoyed Scales & Scoundrels, check out a few other TKO Studios thrilling titles: Sara (written by Garth Ennis) ISBN 9781732748538 The Banks (written by Roxane Gay) ISBN 9781732748583 Sentient (written by Jeff Lemire) ISBN 9781732748545 The Pull (written by Steve Orlando) ISBN 9781952203107 Lonesome Days Savage Nights (written by Steve Niles) ISBN 9781952203114 Redfork (written by Alex Paknadel) ISBN 9781952203091 Scales & Scoundrels Book 2 - ISBN 9781952203237**

**For too long, developers have worked on disorganized application projects, where every part seemed to have its own build system, and no common repository existed for information about the state of the project. Now there's help. The long-awaited official documentation to Maven is here. Written by Maven creator Jason Van Zyl and his team at Sonatype, Maven: The Definitive Guide clearly explains how this tool can bring order to your software development projects. Maven is largely replacing Ant as the build tool of choice for large open source Java projects because, unlike Ant, Maven is also a project management tool that can run reports, generate a project website, and facilitate communication among members of a working team. To use Maven, everything you need to know is in this guide. The first part demonstrates the tool's capabilities through the development, from ideation to deployment, of several sample applications -- a simple software development project, a simple web application, a multi-module project, and a multi-module enterprise project. The second part offers a complete reference guide that includes: The POM and Project Relationships The Build Lifecycle Plugins Project website generation Advanced site generation Reporting Properties Build Profiles The Maven Repository Team Collaboration Writing Plugins IDEs such as Eclipse, IntelliJ, and NetBeans Using and creating assemblies Developing with Maven Archetypes Several sources for Maven have appeared online for some time, but nothing served as an introduction and comprehensive reference guide to this tool -- until now. Maven: The Definitive Guide is the ideal book to help you manage development projects for software, web applications, and enterprise applications. And it comes straight from the source.**

**Dutch Calvinist theologian Herman Bavnick, a significant voice in the development of Protestant theology, remains relevant many years after his death. His four-volume Reformed Dogmatics is one of the most important theological works of the twentieth century. James Eglinton is widely considered to be at the forefront of contemporary interest in Bavnick's life and thought. After spending considerable time in the Netherlands researching Bavnick, Eglinton brings to light a wealth of new insights and previously unpublished documents to offer a definitive biography of this renowned Reformed thinker. The book follows the course of Bavnick's life in a period of dramatic social change, identifying him as an orthodox Calvinist challenged with finding his feet in late modern culture. Based on extensive archival research, this critical biography presents numerous significant and previously ignored or unknown aspects of Bavnick's person and life story. A black-and-white photo insert is included. This volume complements other Baker Academic offerings on Bavnick's theology and ethics, which together have sold 90,000 copies.**

**A Guide to Implementing RPA Systems**

**The Book of Deuteronomy**

**Maven: The Definitive Guide**

**A Centennial History, 1899-1999**

**Transformation via Venture Capital, Minority Investments and Buyouts**

**Scales and Scoundrels Book 1**

**The Cloud-Native Platform**

**This book constitutes the refereed post-conference proceedings of the First International Conference on Innovation and Interdisciplinary Solutions for Underserved Areas, InterSol 2017, and the 6th Colloque National sur la Recherche en Informatique et ses Applications (CNRIA), held in Dakar, Senegal, in April 2017. The 15 papers published at InterSol were selected from 76 submissions and are grouped thematically in science, energy and environment, education, innovation, and healthcare. The proceedings also contain 13 papers from the co-located 6th CNRIA (Colloque National sur la Recherche en Informatique et ses Applications) focusing on network architecture and security, software engineering, data management, and signal processing.**

**You can choose several data access frameworks when building Java enterprise applications that work with relational databases. But what about big data? This hands-on introduction shows you how Spring Data makes it relatively easy to build applications across a wide range of new data access technologies such as NoSQL and Hadoop. Through several sample projects, you'll learn how Spring Data provides a consistent programming model that retains NoSQL-specific features and capabilities, and helps you develop Hadoop applications across a wide range of use-cases such as data analysis, event stream processing, and workflow. You'll also discover the features Spring Data adds to Spring's existing JPA and JDBC support for writing RBDMs-based data access layers. Learn about Spring's template helper classes to simplify the use of database-specific functionality Explore Spring Data's repository abstraction and advanced query functionality Use Spring Data with Redis (key-value store), HBase (column-family), MongoDB (document database), and Neo4j (graph database) Discover the GemFire distributed data grid Solution Explore Spring Data JPA-managed entities to the Web as RESTful web services Simplify the development of HBase applications, using a lightweight object-mapping framework Build example big data**

**Building with Spring Integration**

**Learn how to use, deploy, and maintain Apache Spark with this comprehensive guide, written by the creators of the open-source cluster-computing framework. With an emphasis on improvements and new features in Spark 2.0, authors Bill Chambers and Matei Zaharia break down Spark topics into distinct sections, each with unique goals. You'll explore the basic operations and common functions of Spark's structured APIs, as well as Structured Streaming, a new high-level API for building end-to-end streaming applications. Developers and system administrators will learn the fundamentals of monitoring, tuning, and debugging Spark, and explore machine learning techniques and scenarios for employing MLlib, Spark's scalable machine-learning library. Get a gentle overview of big data and Spark Learn about DataFrames, SQL, and Datasets—Spark's core APIs—through worked examples Dive into Spark's low-level APIs, RDDs, and execution of SQL and DataFrames Understand how Spark runs on a cluster Debug, monitor, and tune Spark clusters and applications Learn the power of Structured Streaming, Spark's stream-processing engine Learn how you can apply MLlib to a variety of problems, including classification or recommendation**

**"A comprehensive overview of the challenges teams face when moving to microservices, with industry-tested solutions to these problems." - Tim Moore, Lighthouse44 reusable patterns to develop and deploy reliable production-quality microservices-based applications, with worked examples in Java Key Features 44 design patterns for building and deploying microservices applications Drawing on decades of unique experience from author and microservice architecture pioneer Chris Richardson A pragmatic approach to the benefits and the drawbacks of microservices architecture Solve service decomposition, transaction management, and inter-service communication Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About The Book Microservices Patterns teaches you 44 reusable patterns to reliably develop and deploy production-quality microservices-based applications. This invaluable set of design patterns builds on decades of distributed system experience, adding new patterns for composing services into systems that scale and perform under real-world conditions. More than just a patterns catalog, this practical guide with worked examples offers industry-tested advice to help you design, implement, test, and deploy your microservices-based application. What You Will Learn How (and why!) to use microservices architecture Service decomposition strategies Transaction management and querying patterns Effective testing strategies Deployment patterns This Book Is Written For Written for enterprise developers familiar with standard enterprise application architecture. Examples are in Java. About The Author Chris Richardson is a Java Champion, a JavaOne rock star, author of Manning's POJOs in Action, and creator of the original CloudFoundry.com. Table of Contents Escaping monolithic hell Decomposition strategies Interprocess communication in a microservice architecture Managing transactions with saga Designing business logic in a microservice architecture Developing business logic with event sourcing Implementing queries in a microservice architecture External API patterns Testing microservices: part 1 Testing microservices: part 2 Developing production-ready services Deploying microservices Refactoring to microservices**

**The Life and Battles of Saigo Takamori**

**Where Boulton, Watt and Murdoch Made History**

**The Definitive Guide, 1st Edition**

**Cloud Foundry**

**Spring Data**

**Building Big Data and Analytics Solutions in the Cloud**

**A Practical Guide**

Chapter 8. Debugging h2; Web Browser Developer Tools; Chrome Developer Tools; Firefox Developer Tools; Debugging h2 on iOS Using Charles Proxy; Debugging h2 on Android; WebPagetest; OpenSSL; OpenSSL Commands; nghttp2; Using nghttp: curl; Using curl; h2i; Wireshark; Summary; Chapter 9. What Is Next?: TCP or UDP?; QUIC; TLS 1.3; HTTP/3?; Summary; Appendix A. HTTP/2 Frames; The Frame Header; DATA; DATA Frame Fields; DATA Frame Flags; HEADERS; HEADERS Frame Fields; HEADERS Frame Flags; PRIORITY; PRIORITY Frame Fields; RST\_STREAM; SETTINGS; SETTINGS Parameters; PUSH\_PROMISE

Microservices is an architectural style in which large, complex software applications are composed of one or more smaller services. Each of these microservices focuses on completing one task that represents a small business capability. These microservices can be developed in any programming language. They communicate with each other using language-neutral protocols, such as Representational State Transfer (REST), or messaging applications, such as IBM® MQ Light. This IBM Redbooks® publication gives a broad understanding of this increasingly popular architectural style, and provides some real-life examples of how you can develop applications using the microservices approach with IBM Bluemix™. The source code for all of these sample scenarios can be found on GitHub (https://github.com/). The book also presents some case studies from IBM products. We explain the architectural decisions made, our experiences, and lessons learned when redesigning these products using the microservices approach. Information technology (IT) professionals interested in learning about microservices and how to develop or redesign an application in Bluemix using

microservices can benefit from this book.

The definitive guide to private equity for investors and finance professionals Mastering Private Equity was written with a professional audience in mind and provides a valuable and unique reference for investors, finance professionals, students and business owners looking to engage with private equity firms or invest in private equity funds. From deal sourcing to exit, LBOs to responsible investing, operational value creation to risk management, the book systematically distils the essence of private equity into core concepts and explains in detail the dynamics of venture capital, growth equity and buyout transactions. With a foreword by Henry Kravis, Co-Chairman and Co-CEO of KKR, and special guest comments by senior PE professionals. This book combines insights from leading academics and practitioners and was carefully structured to offer: A clear and concise reference for the industry expert A step-by-step guide for students and casual observers of the industry A theoretical companion to the INSEAD case book Private Equity in Action: Case Studies from Developed and Emerging Markets Features guest comments by senior PE professionals from the firms listed below: Abraaj • Adams Street Partners • Apex Partners • Baring PE Asia • Bridgepoint • The Carlyle Group • Coler Capital • Debevoise & Plimpton LLP • FMO • Foundry Group • Freshfields Bruckhaus Deringer • General Atlantic • ILPA • Intermediate Capital Group • KKR Capstone • LPEQ • Maxeda • Navis Capital • Northleaf Capital • Oaktree Capital • Partners Group • Permira • Terra Firma

Graphic design guru Tim Leong presents Star Wars trivia in an all-new way—through playful pie charts, bar graphs, and other data-driven infographics. From a Venn diagram of Yoda's idiosyncrasies to an organizational chart of the Empire to a line graph of Grand Moff Tarkin's management decisions, Star Wars Super Graphic shines a new light on the much-adored universe. Equal parts playful and informative, this visual love letter to the vast Star Wars universe will enchant fans of all ages. © and TM Lucasfilm Ltd. Used Under Authorization

Develop, Deploy, and Scale

Accelerating Modernization with Agile Integration

Master the World's Most-Used Programming Language

First International Conference, InterSol 2017 and Sixth Colloque National sur la Recherche en Informatique et ses Applications, CNRIA 2017, Dakar, Senegal, April 11–12, 2017, Proceedings

A Hands-On Guide to the Fundamentals of AWS Cloud

The Information

A Practical Guide for Beginners

The things you need to do to set up a new software project can be daunting. First, you have to select the back-end framework to create your API, choose your database, set up security, and choose your build tool. Then you have to choose the tools to create your front end: select a UI framework, configure a build tool, set up Sass processing, configure your browser to auto-refresh when you make changes, and configure the client and server so they work in unison. If you're building a new application using Spring Boot and Angular, you can save days by using JHipster. JHipster generates a complete and modern web app, unifying: - A high-performance and robust Java stack on the server side with Spring Boot - A sleek, modern, mobile-first front-end with Angular and Bootstrap - A robust microservice architecture with the JHipster Registry, Netflix OSS, the ELK stack, and Docker - A powerful workflow to build your application with Yeoman, Webpack, and Maven/Gradle

Write and run Swift language programs in the Cloud Written by the team of developers that has helped bring the Swift language to Cloud computing, this is the definitive guide to writing and running Swift language programs for cloud environment. In Swift in the Cloud, you'll find full coverage of all aspects of creating and running Swift language applications in Cloud computing environments, complete with examples of real code that you can start running and experimenting with today. Since Apple introduced the Swift language in 2014, it has become one of the most rapidly adopted computer programming languages in history—and now you too can start benefiting from using the same programming language for all components of a scalable, robust business software solution. Create server applications using Swift and run them on pay-as-you-go cloud infrastructure Quickly write and test Swift code snippets in your own cloud sandbox Use Docker containers to deploy Swift applications into multiple cloud environments without having to change code Grasp the elements and structure of the Swift.org open technology project Find out how to avoid the complexities of runtime configuration by using Cloud Foundry buildpacks for Swift Build high performing web applications and REST APIs with an open source Swift based web server framework Scale up your cloud services by running Swift modules in an asynchronous, open source, "serverless" cloud environment Whether you are already using Swift to build mobile applications or a seasoned web developer, Swift in the Cloud will help you leverage server-side Swift to power your next generation of applications.

This volume provides a comprehensive analysis of the ground-breaking historic industrial complex created to the west of Birmingham in the eighteenth century and associated with Matthew Boulton, James Watt, and William Murdoch. The Soho Manufactory (1761-1863) and Soho Mint (1788-1850s) were both situated in the historic parish of Handsworth, now in the city of Birmingham, and the Soho Foundry (1795-1895) lay in the historic township of Smethwick, now within Sandwell Metropolitan Borough. Together they played a key role in the Industrial Revolution, achieving many world "firsts": the first working Watt steam engine, the first steam-engine powered mint and the first purpose-built steam engine manufactory (the Soho Foundry), to name but a few. Existing literature focuses largely on the biography of the people, primarily Boulton and Watt, or the products they manufactured. The place - the Soho complex - has attracted very little attention. This volume is the first to concentrate on the buildings themselves analysing not only their physical origins, development and eventual decline but also the water and steam power systems adopted. An interdisciplinary approach has been employed combining archival research in the magnificent Soho collection at the Library of Birmingham with the results of archaeological excavations. The volume is profusely illustrated with archival material, most published for the first time, and contains a large number of reconstruction plans and drawings by the author.

Work with all aspects of batch processing in a modern Java environment using a selection of Spring frameworks. This book provides up-to-date examples using the latest configuration techniques based on Java configuration and Spring Boot. The Definitive Guide to Spring Batch takes you from the "Hello, World!" of batch processing to complex scenarios demonstrating cloud native techniques for developing batch applications to be run on modern platforms. Finally this book demonstrates how you can use areas of the Spring portfolio beyond just Spring Batch 4 to collaboratively develop mission-critical batch processes. You'll see how a new class of use cases and platforms has evolved to have an impact on batch-processing. Data science and big data have become prominent in modern IT and the use of batch processing to orchestrate workloads has become commonplace. The Definitive Guide to Spring Batch covers how running finite tasks on cloud infrastructure in a standardized way has changed where batch applications are run. Additionally, you'll discover how Spring Batch 4 takes advantage of Java 9, Spring Framework 5, and the new Spring Boot 2 micro-framework. After reading this book, you'll be able to use Spring Boot to simplify the development of your own Spring projects, as well as take advantage of Spring Cloud Task and Spring Cloud Data Flow for added cloud native functionality. Includes a foreword by Dave Syer, Spring Batch project founder. What You'll LearnDiscover what is new in Spring Batch 4 Carry out finite batch processing in the cloud using the Spring Batch project Understand the newest configuration techniques based on Java configuration and Spring Boot using practical examples Master batch processing in complex scenarios including in the cloud Develop batch applications to be run on modern platforms Use areas of the Spring portfolio beyond Spring Batch to develop mission-critical batch processes Who This Book is For Experienced Java and Spring coders new to the Spring Batch platform. This definitive book will be useful in allowing even experienced Spring Batch users and developers to maximize the Spring Batch tool.

Java Cookbook

Your Definitive Guide to Successful Negotiating

The JHipster Mini-Book

JavaScript: The Definitive Guide

The Anatomy of Perception

*The organization pursuing digital transformation must embrace new ways to use and deploy integration technologies, so they can move quickly in a manner appropriate to the goals of multicloud, decentralization, and microservices. The integration layer must transform to allow organizations to move boldly in building new customer experiences, rather than forcing models for architecture and development that pull away from maximizing the organization's productivity.*

*Many organizations have started embracing agile application techniques, such as microservice architecture, and are now seeing the benefits of that shift. This approach complements and accelerates an enterprise's API strategy. Businesses should also seek to use this approach to modernize their existing integration and messaging infrastructure to achieve more effective ways to manage and operate their integration services in their private or public cloud. This IBM® Redbooks® publication explores the merits of what we refer to as agile integration; a container-based, decentralized, and microservice-aligned approach for integration solutions that meets the demands of agility, scalability, and resilience required by digital transformation. It also discusses how the IBM Cloud Pak for Integration marks a significant leap forward in integration technology by embracing both a cloud-native approach and container technology to achieve the goals of agile integration. The target audiences for this book are cloud integration architects, IT specialists, and application developers.*