

Devops On The Microsoft Stack Springer

Deploy, configure, administer, and run Microsoft Azure Stack Hub Key Features Understand the topics required for the Microsoft Azure AZ-600 exam Configure and provide services from Microsoft Azure Stack Hub Implement data center integration with Microsoft Azure Stack Hub Book Description Azure Stack Hub is the on-premise offering from Microsoft, which provides Azure Cloud services within a customer's own data center. It provides consistent processes between on-site and the cloud, allowing developers to test locally and deploy to the cloud in exactly the same manner. Azure Stack Hub Demystified provides complete coverage of deploying, configuring, administering, and running Microsoft Azure Stack Hub efficiently. Firstly, you will learn how to deploy Azure Stack Hub within an organization. As you progress, you'll understand configuration and the different services provided by the platform. The book also focuses on the underlying architecture and connectivity options for the modern data center. Later, you will understand various approaches to DevOps and their implementation, and learn key topics for the AZ-600 exam. By the end of this Azure book, you will have a thorough understanding of Azure Stack Hub and the services that are provided by the platform, along with the confidence and information you need to be able to pass the AZ-600 exam. What you will learn Understand the architecture of Azure Stack Hub Get up to speed with the management and administration of Azure Stack Hub Explore how to administer virtual networking within your Azure Stack Become well versed in using the Azure Stack Hub support model and updating Azure Stack Hub Understand how licensing and billing is done with Azure Stack Hub Discover the tools that can be used to implement security within Azure Stack Hub Focus on how DevOps practices can be incorporated with Azure Stack Hub Who this book is for If you are an Azure Administrator and Azure Stack Hub Operator who provides or is looking to provide cloud services to end users or customers within their own data center, then this book is for you. This book will also be beneficial to those who are preparing for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Master ARM templates, Bicep scripting, and other Azure Infrastructure-as-Code tools, techniques, and practices to run application infrastructure on the Azure cloud. Azure Infrastructure as Code is a comprehensive guide to seamlessly managing your application infrastructure with Azure's native IaC tools. The book is aimed at supporting collaboration between operations professionals and software developers, to help speed up and improve the quality of software delivery. After you master the basics, you'll dive into niche and advanced topics such as testing, reusing templates between multiple teams, and how you can define policy as code. Discover cutting-edge Deployment Stacks, and how they can help you clean up unused resources, group resources in logical containers to help visualize potential changes, and build starting plateaus for other teams to work on. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

Microsoft Hybrid Cloud Unleashed brings together comprehensive and practical insights into hybrid cloud technologies, complete CloudOps and DevOps implementation strategies, and detailed guidance for deploying Microsoft Azure Stack in your environment. Written by five Microsoft Cloud and Datacenter Management MVPs, this book is built on real-world scenarios and the authors' extraordinary hands-on experiences as early adopters. Step by step, the authors help you integrate your optimal mix of private and public cloud, with a unified management experience that lets you move workloads at will, achieving unprecedented flexibility. The authors also guide you through all aspects of building your own secure, high-performance hybrid cloud infrastructure. You'll discover how Azure Stack enables you to run data centers with the same scalability, redundancy, and reliability as Microsoft's Azure data centers; how to integrate Azure infrastructure and platform services with internal operations; and how to manage crucial external dependencies. The book concludes with a deep dive into automating and customizing Azure Stack for maximum reliability, productivity, and cost savings. Detailed information on how to Run a private/hybrid cloud on your hardware in your data center, using APIs and code identical to public Azure Apply ITRL and DevOps lifecycles to your hybrid cloud implementation Gain a thorough understanding of Azure Stack architecture, components, and internals and configure Azure Stack and master the Azure Stack Portal Integrate and utilize infrastructure, core, and custom resource providers Effectively provision, secure, and manage tenants Manage, monitor, troubleshoot, and back up Azure Stack with CloudOps Automate resource provisioning with PowerShell, the Azure CLI, templates, and Azure Stack's API Write your own Azure Resource Manager templates Centrally automate cloud management and complex tasks connected to external systems Develop customized, production-ready Azure Stack marketplace items

Discover high-value Azure security insights, tips, and operational optimizations This book presents comprehensive Azure Security Center techniques for safeguarding cloud and hybrid environments. Leading Microsoft security and cloud experts Yuri Diogenes and Dr. Thomas Shinder show how to apply Azure Security Center's full spectrum of features and capabilities to address protection, detection, and response in key operational scenarios. You'll learn how to secure any Azure workload, and optimize virtually all facets of modern security, from policies and identity to incident response and risk management. Whatever your role in Azure security, you'll learn how to save hours, days, or even weeks by solving problems in most efficient, reliable ways possible. Two of Microsoft's leading cloud security experts show how to: • Assess the impact of cloud and hybrid environments on security, compliance, operations, data protection, and risk management • Master a new security paradigm for a world without traditional perimeters • Gain visibility and control to secure compute, network, storage, and application workloads • Incorporate Azure Security Center into your security operations center • Integrate Azure Security Center with Azure AD Identity Protection Center and third-party solutions • Adapt Azure Security Center's built-in policies and definitions for your organization • Perform security assessments and implement Azure Security Center recommendations • Use incident response features to detect, investigate, and address threats • Create high-fidelity fusion alerts to focus attention on your most urgent security issues • Implement application whitelisting and just-in-time VM access • Monitor user behavior and access, and investigate compromised or misused credentials • Customize and perform operating system security baseline assessments • Leverage integrated threat intelligence to identify known bad actors

Combining DataOps, MLOps and DevOps

Develop software solutions using microservices, DevOps, EF Core, and design patterns for Azure

Implementing Azure: Putting Modern DevOps to Use

Get started with Azure DevOps and develop your DevOps practices

DevOps for SharePoint

Extending Hyperscale Cloud Management to Your Datacenter

Application Performance Management in the Cloud

How do you start? How should you build a plan for cloud migration for your entire portfolio? How will your organization be affected by these changes? This book, based on real-world cloud experiences by enterprise IT teams, seeks to provide the answers to these questions. Here, you'll see what makes the cloud so compelling to enterprises; with which applications you should start your cloud journey; how your organization will change, and how skill sets will evolve; how to measure progress; how to think about security, compliance, and business buy-in; and how to exploit the ever-growing feature set that the cloud offers to gain strategic and competitive advantage.

In the race to compete in today's fast-moving markets, large enterprises are busy adopting new technologies for creating new products, processes, and business models. But one obstacle on the road to digital transformation is placing too much emphasis on technology, and not enough on the types of processes technology enables. What if different lines of business could build their own services and applications?and decision-making was distributed rather than centralized? This report explores the concept of a digital business platform as a way of empowering individual business sectors to act on data in real time. Much innovation in a digital enterprise will increasingly happen at the edge, whether it involves business users (from marketers to data scientists) or IoT devices. To facilitate the process, your core IT team can provide these sectors with the digital tools they need to innovate quickly. This report explores: Key cultural and organizational changes for developing business capabilities through cross-functional product teams A platform for integrating applications, data sources, business partners, clients, mobile apps, social networks, and IoT devices Creating internal API programs for building innovative edge services in low-code or no-code environments Tools including Integration Platform as a Service, Application Platform as a Service, and Integration Software as a Service The challenge of integrating microservices and serverless architectures Event-driven architectures for processing and reacting to events in real time You'll also learn about a complete pervasive integration solution as a core component of a digital business platform to serve every audience in your organization.

Develop faster with DevOps DevOps embraces a culture of unifying the creation and distribution of technology in a way that allows for faster release cycles and more resource-efficient product updating. DevOps For Dummies provides a guidebook for those on the development or operations side in need of a primer on this way of working. Inside, DevOps evangelist Emily Freeman provides a roadmap for adopting the management and technology tools, as well as the culture changes, needed to dive head-first into DevOps. Identify your organization's needs Create a DevOps framework Change your organizational structure Manage projects in the DevOps world DevOps For Dummies is essential reading for developers and operations professionals in the early stages of DevOps adoption.

Sharpen your DevOps knowledge with DevOps Bootcamp About This Book Improve your organization's performance to ensure smooth production of software and services. Learn how Continuous Integration and Continuous Delivery practices can be utilized to cultivate the DevOps culture. A fast-paced guide filled with illustrations and best practices to help you consistently ship quality software. Who This Book Is For The book is aimed at IT Developers and Operations/Administrators who want to quickly learn and implement the DevOps culture in their organization. What You Will Learn Static Code Analysis using SONarqube Configure a Maven-based JEE Web Application Perform Continuous Integration using Jenkins and VSTS Install and configure Docker Converge a Chef node using a Chef workstation Accomplish Continuous Delivery in Microsoft Azure VM and Microsoft Azure App Services (Azure Web Apps) using Jenkins Perform Load Testing using Apache JMeter Build and Release Automation using Visual Studio Team Services Monitor Cloud-based resources In Detail DevOps Bootcamp delivers practical learning modules in manageable chunks. Each chunk is delivered in a day, and each day is a productive one. Each day builds your competency in DevOps. You will be able to take the task you learn every day and apply it to cultivate the DevOps culture. Each chapter presents core concepts and key takeaways about a topic in DevOps and provides a series of hands-on exercises. You will not only learn the importance of basic concepts or practices of DevOps but also how to use different tools to automate application lifecycle management. We will start off by building the foundation of the DevOps concepts. On day two, we will perform Continuous Integration using Jenkins and VSTS both by configuring Maven-based JEE Web Application? We will also integrate Jenkins and Sonar qube for Static Code Analysis. Further, on day three, we will focus on Docker containers where we will install and configure Docker and also create a Tomcat Container to deploy our Java based web application. On day four, we will create and configure the environment for application deployment in AWS and Microsoft Azure Cloud for which we will use Infrastructure as a Service and Open Source Configuration Management tool Chef. For day five, our focus would be on Continuous Delivery. We will automate application deployment in Docker container using Jenkins Plugin, AWS EC2 using Script, AWS Elastic Beanstalk using Jenkins Plugin, Microsoft Azure VM using script, and Microsoft Azure App Services Using Jenkins. We will also configure Continuous Delivery using VSTS. We will then learn the concept of Automated Testing on day six using Apache JMeter and URL-based tests in VSTS. Further, on day seven, we will explore various ways to automate application lifecycle management using orchestration. We will see how Pipeline can be created in Jenkins and VSTS, so the moment Continuous? integration is completed successfully, Continuous Delivery will start and application will be deployed. On the final day, our focus would be on Security access to Jenkins and Monitoring of CI resources, and cloud-based resources in AWS and Microsoft Azure Platform as a Service. Style and Approach This book is all about fast and intensive learning. This means we don't waste time in helping readers get started. The new content is basically about filling in with highly-effective examples to build new things, solving problems in newer and unseen ways, and solving real-world examples.

Kubernetes: Up and Running

DevOps For Dummies

Cognitive Computing Fundamentals for Better Decision Making

Project Management for Distributed Computing

Implementing Azure DevOps Solutions

Patterns and Paradigms for Scalable, Reliable Services

Hands-On Full-Stack Web Development with ASP.NET Core

Welcome to this introductory guide to using Microsoft's Azure Arc service, a new multi-cloud management platform that belongs in every cloud or DevOps estate. As many IT pros know, servers and Azure Kubernetes Service drive a huge amount of consumption in Azure—so why not extend familiar management tools proven in Azure to on-premises and other cloud networks? This practical guide will get you up to speed quickly, with instruction that treads light on the theory and heavy on the hands-on experience to make setting up Azure Arc servers and Kubernetes across multiple clouds a lot less complex. Azure experts and MVPs Buchanan and Joyner provide just the right amount of context so you can grasp important concepts, and get right to the business of using and gaining value from Azure Arc. If your organization has resources across hybrid cloud, multi-cloud, and edge environments, then this book is for you. You will learn how to configure and use Azure Arc to uniformly manage workloads across all of these environments. What You Will Learn Introduces the basics of hybrid, multi-cloud, and edge computing and how Azure Arc fits into that IT strategy Teaches the fundamentals of Azure Resource Manager, setting the reader up with the knowledge needed on the technology that underpins Azure Arc Offers insights into Azure native management tooling for managing on-premises servers and extending to other cloud details an end-to-end hybrid server monitoring scenario leveraging Azure Monitor and/or Azure Sentinel that is seamlessly delivered by Azure Arc Defines a blueprint to achieve regulatory compliance with industry standards using Azure Arc, delivering Azure Policy from Azure Defender for Servers Explores how Git and GitHub integrate with Azure Arc; delves into how GitOps is used with Azure Arc Empowers your DevOps teams to perform tasks that typically fall under IT operations Dives into how to best use Azure CLI with Azure Arc Who This Book Is For DevOps, system administrators, security professionals, and IT workers responsible for servers both on-premises and in the cloud. Some experience in system administration, DevOps, containers, and use of Git/GitHub is helpful.

Modernize your apps with Microsoft Azure by moving web, desktop, and mobile apps to the cloud Key Features Decide which migration strategy is most suitable for your organization and create a migration roadmap Move existing infrastructure to Azure and learn strategies to reduce cost, increase storage, and improve ROI Design secure, scalable, and cost-effective solutions with the help of practical examples Book Description Whether you are trying to re-architect a legacy app or build a cloud-ready app from scratch, using the Azure ecosystem with .NET and Java technologies helps you to strategize and plan your app modernization process effectively. With this book, you'll learn how to modernize your applications by using Azure for containerization, DevOps, microservices, and serverless solutions, and develop time and costs, while also making your applications robust, secure, and scalable. You will delve into improving application efficiency by using container services such as Azure Container Service, Azure Kubernetes Service (AKS), and more. Next, you will learn to modernize your application by implementing DevOps throughout your application development life cycle. You will then focus on increasing the scalability and performance of your overall application with microservices, before learning how to add extra functionality to your application with Azure serverless solutions. Finally, you'll get up to speed with monitoring and troubleshooting techniques. By the end of this book, you will have learned how to use the Azure ecosystem to refactor, re-architect, and rebuild your web, mobile, and desktop applications. What you will learn Use DevOps and containerization technologies to modernize your applications and infrastructure Build microservices using Azure Service Fabric Develop scalable applications using Azure Functions Manage and deploy your application code and database connectivity Secure and monitor your applications in Azure effectively Design for high availability and disaster recovery Who this book is for .NET and Java developers who want to modernize their applications using Azure. Solution architects and experienced developers interested in modernizing legacy applications using Azure will also find this book useful. Some prior understanding of cloud computing concepts will be beneficial.

Learn Azure in a Month of Lunches, Second Edition, is a tutorial on writing, deploying, and running applications in Azure. In it, you'll work through 21 short lessons that give you real-world experience. Each lesson includes a hands-on lab so you can try out and lock in your new skills. Summary You can be incredibly productive with Azure without mastering every feature, function, and service. Learn Azure in a Month of Lunches, Second Edition gets you up and running quickly, teaching you the most important concepts and tasks in 21 practical bite-sized lessons. As you explore the examples, exercises, and labs, you'll learn how to: • Build and take your first steps to Azure mastery? This fully revised new edition covers core changes to the Azure UI, new Azure features, Azure containers, and the upgraded Azure Kubernetes Service. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Microsoft Azure is vast and powerful, offering virtual servers, application templates, and prebuilt services for everything from data storage to AI. To navigate it all, you need a trustworthy guide. In this book, Microsoft engineer and Azure trainer Iain Foulds focuses on core skills for creating cloud-based applications. About the book Learn Azure in a Month of Lunches, Second Edition, is a tutorial on writing, deploying, and running applications in Azure. In it, you'll work through 21 short lessons that give you real-world experience. Each lesson includes a hands-on lab so you can try out and lock in your new skills. What's inside Understanding Azure beyond point-and-click Securing applications and data Automating your environment Azure services for machine learning, containers, and more About the reader This book is for readers who can write and deploy simple web or files/enver applications. About the author Iain Foulds is an engineer and senior content developer with Microsoft. Table of Contents PART 1 - AZURE CORE SERVICES 1 Before you begin 2 Creating a virtual machine 3 Azure Web Apps 4 Introduction to Azure Storage 5 Azure Networking basics PART 2 - HIGH AVAILABILITY AND SCALE 6 Azure Resource Manager 7 High availability and redundancy 8 Load-balancing applications 9 Applications that scale 10 Global databases with Cosmos DB 11 Managing network traffic and routing 12 Monitoring and troubleshooting PART 3 - SECURE BY DEFAULT 13 Backup, recovery, and replication 14 Data encryption 15 Securing information with Azure Key Vault 16 Azure Security Center and updates PART 4 - THE COOL STUFF 17 Machine learning and artificial intelligence 18 Azure Automation 19 Azure containers 20 Azure and the Internet of Things 21 Serverless computing

Summary Cloud Native Patterns your guide to developing strong applications that thrive in the dynamic, distributed, virtual world of the cloud. This book presents a mental model for cloud-native applications, along with the patterns, practices, and tooling that set them apart. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Cloud platforms promise the holy grail: near-zero downtime, infinite scalability, short feedback cycles, fault-tolerance, and cost control. But how do you get there? By applying cloudnative designs, developers can build resilient, easily adaptable, web-scale distributed applications that handle massive user traffic and data loads. Learn these fundamental patterns and practices, and you'll be ready to thrive in the dynamic, distributed, virtual world of the cloud. About the Book With 25 years of experience under her belt, Cornelia Davis teaches you the practices and patterns that set cloud-native applications apart. With realistic examples and expert advice for working with apps, data, services, routing, and more, she shows you how to design and build software that functions beautifully on modern cloud platforms. As you read, you will start to appreciate that cloud-native computing is more about the how and why rather than the where. What's inside The lifecycle of cloud-native apps Cloud-scale configuration management Zero downtime upgrades, versioned services, and parallel deploys Service discovery and dynamic routing Managing interactions between services, including retries and circuit breakers About the Reader Requires basic software design skills and an ability to read Java or a similar language. About the Author Cornelia Davis is Vice President of Technology at Pivotal Software. A teacher at heart, she's spent the last 25 years making good software and great software developers. Table of Contents PART 1 - THE CLOUD-NATIVE CONTEXT Part 1: Defining "cloud-native" Running cloud-native applications in production The platform for cloud-native software PART 2 - CLOUD-NATIVE PATTERNS Event-driven microservices: It's not just request/response App redundancy: Scale-out and statelessness Application configuration: Not just environment variables The application lifecycle: Accounting for constant change Accessing apps: Services, routing, and service discovery Interaction redundancy: Retries and other control loops Fronting services: Circuit breakers and API gateways Troubleshooting: Finding the needle in the haystack Cloud-native data: Breaking the data monolith

With ARM templates and Bicep

With Packer, Terraform, Ansible, and Vagrant

Architecting Software Solutions Using Microservices, DevOps, and Design Patterns for Azure Cloud

A Novel About Delivering the Best of Agile, DevOps, and Microservices

Migrating Applications to the Cloud with Azure

Software Architecture with C# 9 and .NET 5

Develop, maintain, and automate applications on the Azure cloud platform, 2nd Edition

Ramp up your software development with this comprehensive resource Microsoft's Application Lifecycle Management (ALM) makes software development easier and now features support for iOS, MacOS, Android, and Java development. If you are an application developer, some of the important factors you undoubtedly consider in selecting development frameworks and tools include agility, seamless collaboration capabilities, flexibility, and ease of use. Microsoft's ALM suite of productivity tools includes new functionality and extensibility that are sure to grab your attention. Professional Application Lifecycle Management with Visual Studio 2013 provides in-depth coverage of these new capabilities. Authors Mickey Goussset, Martin Hinshelwood, Brian A. Randell, Brian Keller, and Martin Woodward are Visual Studio and ALM experts, and their hands-on approach makes adopting new ALM functionality easy. Streamline software design and deployment with Microsoft tools and methodologies Gain a practical overview of ALM with step-by-step guides and reference material Case studies illustrate specific functionality and provide in-depth instruction Use new capabilities to support iOS, MacOS, Android and Java development Discover this comprehensive solution for modeling, designing, and coordinating enterprise software deployments Over 100 pages of new content, forward-compatible with new product releases Professional Application Lifecycle Management with Visual Studio 2013 provides a complete framework for using ALM to streamline software design and deployment processes using well-developed Microsoft tools and methodologies. Professional Application Lifecycle Management with Visual Studio 2013 is your guide to make use of newly-available ALM features to take your enterprise software development to the next level.

This volume constitutes the refereed proceedings of the 26th European Conference on Systems, Software and Services Process Improvement, EuroSPI conference, held in Edinburgh, Scotland, in September 2019. The 18 revised full papers presented were carefully reviewed and selected from 28 submissions. They are organized in topical sections: Visionary Papers, SPI and Safety and Security, SPI and Assessments, SPI and Future Qualification & Team Performance, and SPI Manifesto and Overview. The selected workshop papers are also presented and organized in following topical sections: GamifySPI, Digitalisation of Industry, Infrastructure and E-Mobility, -Best Practices in Implementing Traceability, -Good and Bad Practices in Improvement, -Functional Safety and Cybersecurity, -Experiences with Agile and Lean, -Standards and Assessment Models, -Team Skills and Diversity Strategies, -Recent Innovations.

Design scalable and high-performance enterprise applications using the latest features of C# 10 and .NET 6 Key Features Gain comprehensive software architecture knowledge and the skillset to create fully modular apps Solve scalability problems in web apps using enterprise architecture patterns Master new developments in front-end architecture and the application of AI for software architects Book Description Software architecture is the practice of implementing structures and systems that streamline the software development process and improve the quality of an app. This fully revised and expanded third edition, featuring the latest features of .NET 6 and C# 10, enables you to acquire the key skills, knowledge, and best practices required to become an effective software architect. Software Architecture with C# 10 and .NET 6, Third Edition features new chapters that describe the importance of the software architect, microservices with ASP.NET Core, and analyzing the architectural aspects of the front-end in the applications, including the new approach of .NET MAUI. It also includes a new chapter focused on providing a short introduction to artificial intelligence and machine learning using ML.NET, and updated chapters on Azure Kubernetes Service, EF Core, and Blazor. You will begin by understanding how to transform user requirements into architectural needs and exploring the differences between functional and non-functional requirements. Next, you will explore how to choose a cloud solution for your infrastructure, taking into account the factors that will help you manage a cloud-based app successfully. Finally, you will analyze and implement software design patterns that will allow you to solve common development problems. By the end of this book, you will be able to build and deliver highly scalable enterprise-ready apps that meet your business requirements. What you will learn Use proven techniques to overcome real-world architectural challenges Apply architectural approaches such as layered architecture Leverage tools such as containers to manage microservices effectively Get up to speed with Azure features for delivering global solutions Program and maintain Azure Functions using C# 10 Understand when it is best to use test-driven development (TDD) Implement microservices with ASP.NET Core in modern architectures Enrich your application with Artificial Intelligence Get the best of DevOps principles to enable CI/CD environments Who this book is for This book is for engineers and senior software developers aspiring to become architects or looking to build enterprise applications with the .NET Stack. Basic familiarity with C# and .NET is required to get the most out of this book.

Design scalable and high-performance enterprise applications using the latest features of C# 8 and .NET Core 3 Key Features Become a software architect capable of creating modular apps for specific business needs Design high-performance software systems using the latest features of C# 8 and .NET Core 3 Solve scalability problems in web apps using enterprise architectural patterns Book Description Software architecture is the practice of implementing structures and systems that streamline the software development process and improve the quality of an app. With this software architecture book, you'll follow a hands-on approach to learning various architectural methods that will help you develop and deliver high-quality products. You'll begin by understanding how to transform user requirements into architectural needs and exploring the differences between functional and non-functional requirements. Next, you'll explore how to carefully choose a cloud solution for your infrastructure, along with covering dos and don'ts that will help you manage your app in a cloud-based environment. Later chapters will cover techniques and processes such as DevOps, microservices, and continuous integration, along with providing insights into implementing them using Microsoft technologies such as ASP.NET Core, the Entity Framework, Cosmos DB, and Azure DevOps. You will also learn about testing frameworks and automation tools that will help you through the development process. Finally, you'll discover design patterns and various software approaches that will allow you to solve common problems faced during development. By the end of this book, you'll be able to develop and deliver highly scalable enterprise-ready apps that meet customers' business needs. What you will learn Overcome real-world architectural challenges and solve design consideration issues Apply architectural approaches like Layered Architecture, service-oriented architecture (SOA), and microservices Learn to use tools like containers, Docker, and Kubernetes to manage microservices Get up to speed with Azure Cosmos DB for delivering multi-continental solutions Learn how to program and maintain Azure Functions using C# Understand when to use test-driven development (TDD) as an approach for software development Write automated functional test cases for your projects Who this book is for This book is for professional and senior developers aspiring to become architects or looking to build enterprise applications with the .NET Stack. Experience with C# and .NET is required to understand this book.

Mastering Microsoft Dynamics 365 Business Central

Microsoft Hybrid Cloud Unleashed with Azure Stack and Azure

Building Cloud Apps with Microsoft Azure

Transform Your Data to Derive Powerful Insights Using Microsoft Azure

Azure Stack Hub Demystified

Cloud Debugging and Profiling in Microsoft Azure

DevOps on the Microsoft Azure Stack : VSTS and TFS 2018

This unique volume explores cutting-edge management approaches to developing complex software that is efficient, scalable, sustainable, and suitable for distributed environments. Practical insights are offered by an international selection of pre-eminent authorities, including case studies, best practices, and balanced corporate analyses. Emphasis is placed on the use of the latest software technologies and frameworks for life-cycle methods, including the design, implementation and testing stages of software development. Topics and features: · Reviews approaches for reusability, cost and time estimation, and for functional size measurement of distributed software applications · Discusses the core characteristics of a large-scale defense system, and the design of software project management (SPM) as a service · Introduces the 3PR framework, research on crowdsourcing software development, and an innovative approach to modeling large-scale multi-agent software systems · Examines a system architecture for ambient assisted living, and an approach to cloud migration and management assessment · Describes a software error proneness mechanism, a novel Scrum process for use in the defense domain, and an ontology annotation for SPM in distributed environments · Investigates the benefits of agile project management for higher education institutions, and SPM that combines software and data engineering This important text/reference is essential reading for project managers and software engineers involved in developing software for distributed computing environments. Students and researchers interested in SPM technologies and frameworks will also find the work to be an invaluable resource. Prof. Zaigham Mahmood is a Senior Technology Consultant at Debesis Education UK and an Associate Lecturer (Research) at the University of Derby, UK. He also holds positions as Foreign Professor at MUST and ITU in Islamabad, Pakistan, and Professor Extraordinaire at the North West University Potchefstroom, South Africa.

Full-stack development is the name of the game. Developers who can build complete solutions, including both backend and frontend products, are in great demand in the industry, hence being able to do so a desirable skill. However, embarking on the path to becoming a modern full-stack developer can be overwhelmingly difficult, so the key purpose of this book is to simplify and ease the process. This comprehensive guide will take you through the journey of becoming a full-stack developer in the realm of the web and .NET. It begins by implementing data-oriented RESTful APIs, leveraging ASP.NET Core and Entity Framework. Afterward, it describes the web development field, including its history and future horizons. Then, you'll build webbased Single-Page Applications (SPAs) by learning about numerous popular technologies, namely TypeScript, Angular, React, and Vue. After that, you'll learn about additional related concerns involving deployment, hosting, and monitoring by leveraging the cloud; specifically, Azure. By the end of this book, you'll be able to build, deploy, and monitor cloud-based, data-oriented, RESTful APIs, as well as modern web apps, using the most popular frameworks and technologies. What you will learn Build RESTful APIs in C# with ASP.NET Core, web APIs, and Entity Framework See the history and future horizons of the web development field Bring static-typing to web apps using TypeScript Build web applications using Angular, React, and Vue Deploy your application to the cloud Write web applications that scale, can adapt to changes, and are easy to maintain Discover best practices and real-world tips and tricks Secure your backend server with Authentication and Authorization using OAuth 2.0 Who this book is for This book is for developers who are keen on strengthening their skills in the field of cloud-based full-stack web development. You need basic knowledge of web-related pillars, including HTML, CSS, and JavaScript, as well as C# and REST. This book targets novice developers in the realm of Web development and ASP.NET who desire to advance to modern Web and ASP.NET Core development and leverage the Cloud to manage and bring everything together. This ebook walks you through a patterns-based approach to building real-world cloud solutions. The patterns apply to the development process as well as to architecture and coding practices. The content is based on a presentation developed by Scott Guthrie and delivered by him at the Norwegian Developers Conference (NDC) in June of 2013 (part 1, part 2), and at Microsoft Tech Ed Australia in September 2013 (part 1, part 2). Many others updated and augmented the content while transitioning it from video to written form. Who should read this book Developers who are curious about developing for the cloud, are considering a move to the cloud, or are new to cloud development will find here a concise overview of the most important concepts and practices they need to know. The concepts are illustrated with concrete examples, and each chapter includes links to other resources that provide more in-depth information. The examples and the links to additional resources are for Microsoft frameworks and services, but the principles illustrated apply to other web development frameworks and cloud environments as well. Developers who are already developing for the cloud may find ideas here that will help make them more successful. Each chapter in the series can be read independently, so you can pick and choose topics that you're interested in. Anyone who watched Scott Guthrie's "Building Real World Cloud Apps with Windows Azure" presentation and wants more details and updated information will find that here. Assumptions This ebook expects that you have experience developing web applications by using Visual Studio and ASP.NET. Familiarity with C# would be helpful in places.

Take a deep dive into the concepts of machine learning as they apply to contemporary business and management. You will learn how machine learning techniques are used to solve fundamental and complex problems in society and industry. Machine Learning for Decision Makers serves as an excellent resource for establishing the relationship of machine learning with IoT, big data, and cognitive and cloud computing to give you an overview of how these modern areas of computing relate to each other. This book introduces a collection of the most important concepts of machine learning and sets them in context with other vital technologies that decision makers need to know about. These concepts span the process from envisioning the problem to applying machine-learning techniques to your particular situation. This discussion also provides an insight to help deploy the results to improve decision-making. The book uses case studies and jargon busting to help you grasp the theory of machine learning quickly. You'll soon gain the big picture of machine learning and how it fits with other cutting-edge IT services. This knowledge will give you confidence in your decisions for the future of your business. What You Will Learn Discover the machine learning, big data, and cloud and cognitive computing technology stack Gain insights into machine learning concepts and practices Understand business and enterprise decision-making using machine learning Absorb machine-learning best practices Who This Book Is For Managers tasked with making key decisions who want to learn how and when machine learning and related technologies can help them.

Re-architect and rebuild your applications using cloud-native technologies

A Developer's Guide to DevOps Architecture the Right Way

Outperform Analytics and Software Development with Expert Practices on Process Optimization and Automation (English Edition)

DevOps on the Microsoft Stack

Dive into the Future of Infrastructure

Azure DevOps Explained

.NET DevOps for Azure

Accelerate the delivery of software, data, and machine learning KEY FEATURES? Each chapter harmonizes the DevOps, Data Engineering, and Optimized Machine Learning cultures. ? Equips readers with AGILE skills to continuously re-prioritize production backlogs. ? Containerization, Docker, Kubernetes, DataOps, and MLOps are all rolled together. DESCRIPTION This book instructs readers on how to operationalize the creation of systems, software applications, and business information using the best practices of DevOps, DataOps, and MLOps, among other things. From software unit packaging code and its dependencies to automating the software development lifecycle and deployment, the book provides a learning roadmap that begins with the basics and progresses to advanced topics. This book teaches you how to create a culture of cooperation, affinity, and tooling at scale using DevOps, Docker, Kubernetes, Data Engineering, and Machine Learning. Microservices design, setting up clusters and maintaining them, processing data pipelines, and automating operations with machine learning are all topics that will aid you in your career. When you use each of the xOps methods described in the book, you will notice a clear shift in your understanding of system development. Throughout the book, you will see how every stage of software development is modernized with the most up-to-date technologies and the most effective project management approaches. WHAT YOU WILL LEARN? Learn about the Packaging code and all its dependencies in a container. ? Utilize DevOps to automate every stage of software development. ? Learn how to create Microservices that are focused on a specific issue. ? When you Utilize Kubernetes to containerize applications in a variety of settings. ? Using DataOps, you can align people, processes, and technology. WHO THIS BOOK IS FOR This book is meant for the Software Engineering team, Data Professionals, IT Operations and Application Development Team with prior knowledge in software development. TABLE OF CONTENTS 1. Container - Containerization is the New Virtualization 2. Docker with Containers for Developing and Deploying Software 3. DevOps to Build at Scale a Culture of Collaboration, Affinity, and Tooling 4.

Docker Containers for Microservices Architecture Design 5. Kubernetes - The Cluster Manager for Container 6. Data Engineering with DataOps 7. MLOps: Engineering Machine Learning Operations 8. xOps Best Practices DevOps represents a powerful new approach to delivering IT services, where software developers and IT operations teams work closely together to deploy projects far more often and more reliably. As pioneers like Google, Amazon, and Netflix have discovered, DevOps can improve efficiency, accelerate delivery, and reduce costs. However, most discussions of DevOps focus on theory rather than implementation, and DevOps raises unique issues in virtualized environments. DevOps for VMware Administrators addresses these issues, offering realistic insights both for implementing DevOps and for applying new tools to maximize its value. The authors also offer extensive hands-on practice with solving realistic problems and improving IT efficiency by utilizing these four tools: Puppet IT automation software for managing infrastructure across its lifecycle, including provisioning, configuration, orchestration, and reporting Chef configuration management tool for writing system configuration "recipes" that streamline server configuration and maintenance and can integrate with cloud-based platforms such as Rackspace and Amazon

EC2 to automate provisioning Ansible, the flexible open source toolkit for automating configuration management and orchestration in Unix and Unix-style environments Windows PowerShell for automating tasks and configuration management in Windows environments

Explore powerful Azure DevOps solutions to develop and deploy your software faster and more efficiently. Key Features Build modern microservice-based systems with Azure architecture Learn to deploy and manage cloud services and virtual machines Configure clusters with Azure Service Fabric for deployment Book Description This Learning Path helps you understand microservices architecture and leverage various services of Microsoft Azure Service Fabric to build, deploy, and maintain highly scalable enterprise-grade applications. You will learn to select an appropriate Azure backend structure for your solutions and work with its toolkit and managed apps to share your solutions with its service catalog. As you progress through the Learning Path, you will study Azure Cloud Services, Azure-managed Kubernetes, and Azure Container Services deployment techniques. To apply all that you've understood, you will build an end-to-end Azure system in scalable, decoupled tiers for an industrial bakery with three business domains. Toward the end of this Learning Path, you will build another scalable architecture using Azure Service Bus topics to send orders to several proven decoupling business domains with scalable worker roles processing these orders. By the end of this Learning Path, you will be comfortable in using development, deployment, and maintenance processes to build robust cloud solutions on Azure. This Learning Path includes content from the following Packt products: Learn Microsoft Azure by Mohamed Wall Implementing Azure Solutions - Second Edition by Florian Klaffenbach, Oliver Michalski, Markus Klein Microservices with Azure by Hamit Tanasseri and Rahul Rai What you will learn Study various Azure Service Fabric application programming models Create and manage a Kubernetes cluster in Azure Kubernetes Service Use site-to-site VPN and ExpressRoute connections in your environment Design an Azure IoT app and learn to operate it in various scenarios Implement a hybrid Azure design using Azure Stack Build Azure SQL databases with Code First Migrations Integrate client applications with Web API and SignalR on Azure Implement the Azure Active Directory (Azure AD) across the entire system Who this book is for If you are an IT system architect, network admin, or a DevOps engineer who wants to implement Azure solutions for your organization, this Learning Path is for you. Basic knowledge of the Azure Cloud platform will be beneficial.

Legend has it that Google deploys over two billion application containers a week. How's that possible? Google revealed the secret through a project called Kubernetes, an open source cluster orchestrator (based on its internal Borg system) that radically simplifies the task of building, deploying, and maintaining scalable distributed systems in the cloud. This practical guide shows you how Kubernetes and container technology can help you achieve new levels of velocity, agility, reliability, and efficiency. Authors Kelsey Hightower, Brendan Burns, and Joe Beda—who've worked on Kubernetes at Google and other organizations—explain how this system fits into the lifecycle of a distributed application. You will learn how to use tools and APIs to automate scalable distributed systems, whether it is for online services, machine-learning applications, or a cluster of Raspberry Pi computers. Explore the distributed system challenges that Kubernetes addresses Dive into containerized application development, using containers such as Docker Create and run containers on Kubernetes, using the docker image format and container runtime

Explore specialized objects essential for running applications in production Reliably roll out new software versions without downtime or errors Get examples of how to develop and deploy real-world applications in Kubernetes

Learn Azure in a Month of Lunches, Second Edition

Life-Cycle Methods for Developing Scalable and Reliable Tools

Hands-On DevOps practices implementation using Azure DevOps

Transform your software deployment process with Microsoft Azure

Microsoft Azure Security Center

Learn about Azure DevOps Services to successfully apply DevOps strategies

Microsoft Azure Essentials Azure Web Apps for Developers

Explore and work with various Microsoft Azure services for real-time Data Analytics KEY FEATURES Understanding what Azure can do with your data Understanding the analytics services offered by Azure Understand how data can be transformed to generate more data Understand what is done after a Machine Learning model is built Go through some Data Analytics real-world use cases DESCRIPTION Data is the key input for Analytics. Building and implementing data platforms such as Data Lakes, modern Data Marts, and Analytics at scale require the right cloud platform that Azure provides through its services. The book starts by sharing how analytics has evolved and continues to evolve. Following the introduction, you will learn about what is meant by a Data Lake and understand how Azure Data Lake Storage is used for analytical workloads. You will then learn about critical services that will provide actual Machine Learning capabilities in Azure. The book also talks about Azure Data Catalog for cataloging, Azure AD for Access Management, Web Apps and PowerApps for cloud web applications, Cognitive services for Speech, Vision, Search and Language, Azure VM for computing and Data Science VMs, Functions as serverless computing, Kubernetes and Containers as deployment options. Towards the end, the book discusses two use cases on Analytics. WHAT WILL YOU LEARN Explore and work with various Azure services Orchestrate and ingest data using Azure Data Factory Learn how to use Azure Stream Analytics Get to know more about Synapse Analytics and its features Learn how to use Azure Analysis Services and its functionalities WHO THIS BOOK IS FOR This book is for anyone who has basic to intermediate knowledge of cloud and analytics concepts and wants to use Microsoft Azure for Data Analytics. This book will also benefit Data Scientists who want to use Azure for Machine Learning. TABLE OF CONTENTS 1. Data and its power 2. Evolution of Analytics and its Types 3. Internet of Things 4. AI and ML 5. Why cloud 6. What are a data lake and a modern datamart 7. Introduction to Azure services 8. Types of data 9. Azure Data Factory 10. Stream Analytics 11. Azure Data Lake Store and Azure Storage 12. Cosmos DB 13. Synapse Analytics 14. Azure Databricks 15. Azure Analysis Services 16. Power BI 17. Azure Machine Learning 18. Sample Architectures and synergies - Real-Time and Batch 19. Azure Data Catalog 20. Azure Active Directory 21. Azure Webapps 22. Power apps 23. Time Series Insights 24. Azure Cognitive Services 25. Azure Logicapps 26. Azure VM 27. Azure Functions 28. Azure Containers 29. Azure Kubernetes Service 30. Use Case 1 31. Use Case 2

Accelerate and Automate Build, Deploy, and Management of applications to achieve High Availability. About This Book This guide highlights tools that offer development and deployment environments for application services Secure and continuously monitor your web application in order to make it highly available Use Visual Studio Team Services for Continuous Integration and Continuous Development to expedite your application life cycle management process Use Microsoft Azure App Services (Azure Web Apps / Azure Websites), PaaS offering from Microsoft to deploy web application Who This Book Is For This book is for DevOps engineers, system administrators, and developers (.net) who want to implement DevOps for their organization. You do not need to have any knowledge of VSTS or Azure App Services (Azure Web Apps / Azure Websites). What You Will Learn Explore the features of PaaS and aPaaS in DevOps Use Visual Studio Team Services (VSTS) to manage versions of code and integrating VSTS with Eclipse IDE Understand and configure Continuous Integration in VSTS Review Unit Test Execution for Automated Testing Create different environments that can be used to continuous deploy a web application Configure Roll-based Access to enable secure access for Azure Web Apps Create and configure the App Service Environment to enhance security Understand the execution of the end-to-end automation process Conduct Performance Testing using JMeter Discover the different monitoring options available in Microsoft Azure Portal In Detail This book will teach you all about the Visual Studio Team Services and Microsoft Azure PaaS offerings that support Continuous Integration, Continuous Delivery, Continuous Deployment, and execution in the cloud with high availability, disaster recovery, and security. You will first be given a tour of all the concepts and tools that Microsoft Azure has to offer and how these can be used in situations to cultivate the DevOps culture. You'll be taught how to use and manage Visual Studio Team Services (VSTS) and about the structure of the sample application used throughout the book. You will become familiar with the nitty gritty of Continuous Integration and Continuous Development with VSTS and Microsoft Azure Apps. You will not only learn how to create App service environments, but also how to compare Azure Web Apps and App Service Environments to deploy web applications in a more secure environment. Once you have completed Continuous Integration and created the Platform for application deployment, you will learn more about the final stepping stone in achieving end-to-end automation using approval-based Continuous Delivery and Deployment. You will then learn about Continuous Monitoring, using the monitoring and notification options provided by Microsoft Azure and Visual Studio Team Services. Style and Approach This book is an easy-to-follow guide filled with examples and real-world applications for gaining an in-depth understanding of Microsoft Azure and Visual Studio. This book will help you leverage Microsoft Azure and Visual Studio using real-world examples.

Mastering Microsoft Dynamics 365 Business Central is a comprehensive solution which will help you in managing end-to-end business requirements with its features to connect to your financials, sales, service, and operations to streamline business processes. This book will help you in advancing with developing the solutions for your customers ...

The book covers the best practices and approaches for software architects to follow when developing .NET and # solutions, along with the most up to date cloud environments and tools to enable effective app development, delivery, and deployment.

Discover extension development best practices, build advanced ERP integrations, and use DevOps tools

Cloud Native Patterns

Azure Infrastructure as Code

26th European Conference, EuroSPI 2019, Edinburgh, UK, September 18–20, 2019, Proceedings

Azure Arc-Enabled Kubernetes and Servers

Achieving DevOps

Biggs

This guide will get you up and running with Azure DevOps Services to implement DevOps practices like configuration management, release management, continuous integration, infrastructure as code, and application monitoring.

Implement real-world DevOps and cloud deployment scenarios using Azure Repos, Azure Pipelines, and other Azure DevOps tools Key Features Improve your application development life cycle with Azure DevOps in a step-by-step manner Apply continuous integration and continuous deployment to reduce application downtime Work with real-world CI/CD scenarios curated by a team of renowned Microsoft MVPs and MCTs Book Description Developing applications for the cloud involves changing development methodologies and procedures. Continuous integration and continuous deployment (CI/CD) processes are a must today, but are often difficult to implement and adopt. Azure DevOps is a Microsoft Azure cloud service that enhances your application development life cycle and enables DevOps capabilities. Starting with a comprehensive product overview, this book helps you to understand Azure DevOps and apply DevOps techniques to your development projects. You'll find out how to adopt DevOps techniques for your development processes by using built-in Azure DevOps tools. Throughout the course of this book, you'll also discover how to manage a project with the help of project management techniques such as Agile and Scrum, and then progress toward development aspects such as source code management, build pipelines, code testing and artifacts, release pipelines, and GitHub integration. As you learn how to implement DevOps practices, this book will also provide you with real-world examples and scenarios of DevOps adoption. By the end of this DevOps book, you will have learned how to adopt and implement Azure DevOps features in your real-world development processes. What you will learn Get to grips with Azure DevOps Find out about project management with Azure Boards Understand source code management with Azure Repos Build and release pipelines Run quality tests in build pipelines Use artifacts and integrate Azure DevOps in the GitHub flow Discover real-world CI/CD scenarios with Azure DevOps Who this book is for This book is for developers, solutions architects, and DevOps engineers interested in getting started with cloud DevOps practices on Azure. Prior understanding of Azure architecture and services is necessary. Some knowledge of DevOps principles and techniques will be useful.

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

Ben is stuck. A development lead with a strong vision for how the intersection of development and operations at his office can be improved, he can't help but feel overwhelmed and discouraged by common problems such as slow turnaround time, rushed and ineffective handover documentation, mounting technical debt, and a lagging QA process. What steps should Ben take to build the momentum needed to create positive changes within his company? In this unique business novel by Dave Harrison and Knox Lively, two DevOps professionals with years of diverse experience in the industry, you follow Ben as he solves work frustrations in order to adopt Agile, DevOps, and microservices architectures for his organization. Achieving DevOps addresses the “Now what?” moment many DevOps professionals face on their journey. The story provides you with the knowledge you need to navigate the internal political waters, build management support, show measurable results, and bring DevOps successfully into your organization. Come away with practical lessons and timeless business concepts. You'll know how to effect change in a company from the bottom up, gain support, and instill a pattern of progressively building on success. Experience Ben's progress vicariously in Achieving DevOps and bridge the gap between inspiration and the implementation of your own DevOps practices. Who This Book Is For Those serving as change agents who are working to influence and move their organizations toward a DevOps approach to software development and deployment: those working to effect change from the bottom up such as development leads, QA leads, project managers, and individual developers, and IT directors, CTOs, and others at the top of an organization who are being asked to lend their support toward DevOps implementation efforts

Agile, DevOps and Cloud Computing with Microsoft Azure

DevOps for VMware Administrators

Learn end-to-end web development with leading frontend frameworks, such as Angular, React, and Vue

Hands-On Software Architecture with C# 8 and .NET Core 3

Designing Distributed Systems

Software Architecture with C# 10 and .NET 6

Architecting software solutions using microservices, DevOps, and design patterns for Azure, 2nd Edition

This book tells you everything you need to know to help your organization implement DevOps on the Microsoft platform. You will learn how to use Visual Studio, Visual Studio Team Services, and Azure to implement a complete DevOps process in your company. You will learn about Agile Project Management, Continuous Integration, Continuous Delivery, Technical Debt Management, Automatic Testing and Monitoring, and see how all these areas fit together. DevOps is important for organizations that want to make the best use of their resources and avoid costly mistakes. Teams that embrace DevOps deploy code up to 30 times more frequently than their competition and less than 50% of their deployments fail according to Puppet Labs State of DevOps survey. DevOps on the Microsoft Stack shows you how to help your organization implement DevOps, covering the tooling they will need and how to make everything work together while following best practices. The focus is not only on technology but also on the cultural issues that teams will face when implementing DevOps. The author's goal is to not only show you which tooling there is but help you to successfully use everything together to implement DevOps in your projects and organization. In this book, you'll learn: What DevOps is and how it can help development teams How to use Visual Studio, Visual Studio Team Services, and Azure to setup a DevOps process How to introduce DevOps to your organization and how to overcome problems

Use this book as your one-stop shop for architecting a world-class DevOps environment with Microsoft technologies. .NET DevOps for Azure is a synthesis of practices, tools, and process that, together, can equip a software organization to move fast and deliver the highest quality software. The book begins by discussing the most common challenges faced by developers in DevOps today and offers options and proven solutions on how to implement DevOps for your team. Daily, millions of developers use .NET to build and operate mission-critical software systems for organizations around the world. While the marketplace has scores of information about the technology, it is completely up to you to put together all the blocks in the right way for your environment. The relevant principles are covered first along with how to implement that part of the environment. And while variances in tools, language, or requirements will change the needed implementation, the DevOps model is the architecture for the working environment for your team. You can modify parts of the model to customize it to your enterprise, but the architecture will enable all of your teams and applications to accelerate in performance. What You Will Learn Get your .NET applications into a DevOps environment in Azure Analyze and address the part of your DevOps process that causes delays or bottlenecks Track code using Azure Repos and conduct acceptance tests Apply the rules for segmenting applications into Git repositories Understand the different types of builds and when to use each Know how to think about code validation in your DevOps environment Provision and configure environments; deploy release candidates across the environments in Azure Monitor and support software that has been deployed to a production environment Who This Book Is For .NET Developers who are using or want to use DevOps in Azure but don't know where to begin

Develop a solid understanding of cloud computing, Linux virtual machines, container virtualization, and other fundamental concepts to create and manage your Linux workload in Azure Key Features Deploy and manage virtual machines in the Azure environment Explore open source tools to integrate automation and orchestration Implement Linux features to create and manage containers Book Description Thanks to its flexibility in delivering scalable cloud solutions, Microsoft Azure is a suitable platform for managing all your workloads. You can use it to implement Linux virtual machines and containers, and to create applications in open source languages with open APIs. This Linux administration book first takes you through the fundamentals of Linux and Azure to prepare you for the more advanced Linux features in later chapters. With the help of real-world examples, you'll learn how to deploy virtual machines (VMs) in Azure, expand their capabilities, and manage them efficiently. You will manage containers and use them to run applications reliably, and in the concluding chapter, you'll explore troubleshooting techniques using a variety of open source tools. By the end of this book, you'll be proficient in administering Linux on Azure and leveraging the tools required for deployment. What you will learn Grasp the fundamentals of virtualization and cloud computing Understand file hierarchy and mount new filesystems Maintain the life cycle of your application in Azure Kubernetes Service Manage resources with the Azure CLI and PowerShell Manage users, groups, and filesystem permissions Use Azure Resource Manager to redeploy virtual machines Implement configuration management to configure a VM correctly Build a container using Docker Who this book is for If you are a Linux administrator or a Microsoft professional looking to deploy and manage your workload in Azure, this book is for you. Although not necessary, knowledge of Linux and Azure will assist with understanding core concepts.

The “Microsoft Azure Essentials” series helps you advance your technical skills with Microsoft Azure. “Microsoft Azure Essentials: Azure Web Apps for Developers” focuses on providing essential information about developing web applications hosted on Azure Web Apps. It is written with the developer who has experience using Visual Studio and the .NET Framework in mind. If Azure Web Apps is new to you, this book is for you. If you have experience developing for Azure Web Apps, this book is for you, too, because there are features and tools discussed in this text that are new to the platform.

Building hybrid cloud, IaaS, and PaaS solutions

WinOps

Best Practices for DevOps, Data Storage, High Availability, and More

Designing change-tolerant software

Hands-On Linux Administration on Azure

Microsoft Hybrid Cloud Unleashed with Azure Stack and Azure, First Edition

Machine Learning for Decision Makers

Use this collection of best practices and tips for assessing the health of a solution. This book provides detailed techniques and instructions to quickly diagnose aspects of your Azure cloud solutions. The initial chapters of this book introduce you to the many facets of Microsoft Azure, explain why and how building for the cloud differs from on-premise development, and outline the need for a comprehensive strategy to debugging and profiling in Azure. You learn the major types of blades (FaaS, SaaS, PaaS, IaaS), how different views can be created for different scenarios, and you will become familiar with the Favorites section, Cost Management & Billing blade, support, and Cloud Shell. You also will know how to leverage Application Insights for application performance management, in order to achieve a seamless cloud development experience. Application Insights, Log Analytics, and database storage topics are covered. The authors further guide you on identity security with Azure AD and continuous delivery with CI and CD covered in detail along with the capabilities of Azure DevOps. And you are exposed to external tooling and trouble shooting in a production environment. After reading this book, you will be able to apply methods to key Azure services, including App Service (Web Apps, Function Apps, and Logic Apps), Cloud Services, Azure Container Service, Azure Active Directory, Azure Storage, Azure SQL Database, Cosmos DB, Log Analytics, and many more. What You Will Learn Debug and manage the performance of your applications Leverage Application Insights for application performance management Extend and automate CI/CD with the help of various build tools, including Azure DevOps, TeamCity, and Cake bootstrapper Who This Book Is For Application developers, designers, and DevOps personnel who want to find a one-stop shop in best practices for managing their application in the cloud and for debugging the issues accordingly

A step-by-step guide to understand Agile, Scrum, DevOps and Cloud Computing using Azure DevOps and Microsoft Azure Cloud DESCRIPTION Agile development and implementation of Scrum methodologies require quick delivery of applications. Manual activities to manage application lifecycle management are no longer sufficient. This book will cover the DevOps practices implementation that helps to achieve speed for faster time to market using transformation in culture using people, processes, and tools. This book discusses the definition of Cloud computing and the benefits of Cloud Service Models. You will understand how Agile, DevOps practices implementation and Cloud computing can be utilized effectively to transform the culture of an organization. The main objective of this book is to demonstrate continuous practices of the DevOps culture using Microsoft Azure DevOps and Microsoft Azure Cloud. You will learn how to track features, user stories, backlogs, dashboards, and burndown charts. You will also learn how to create and manage repositories. This book gives an overview of Microsoft Azure Cloud and Azure App Services and a brief description of virtual machines and App Services. It summarizes Build and Release definitions available in Microsoft Azure DevOps and explains how to configure Pipelines and create end-to-end automation pipelines. KEY FEATURES ● Learn how to do Continuous Planning in Azure DevOps ● Learn the basics of Continuous Code Inspection and importance of Code Quality ● Learn how continuous integration can make a difference in the application life cycle ● Learn how to create and configure Cloud resources using Platform as a Service Model ● Learn how to perform continuous integration using the YAML script and continuous delivery pipeline using a release pipeline ● Learn how to configure monitoring for Platform as a Service resources WHAT WILL YOU LEARN By the end of the book, you will get an overview of Agile, Scrum, DevOps and Continuous Practices such as Continuous Integration, Continuous Delivery, Cloud Computing, and Continuous Code Inspection. You will learn how all these practices can be utilized in real-life scenarios with the sample applications. This book will provide detailed insights into Microsoft Azure Cloud, especially Platform as a Service Model. A step-by-step implementation guide of continuous practices of DevOps will help beginners to get started with. WHO THIS BOOK IS FOR DevOps Evangelists, DevOps Engineers, Technical Specialists, Technical Architects, and Cloud Experts Basic knowledge of application development and deployment, Cloud computing, and DevOps practices Beginners Table of Contents 1. An overview of Agile 2. Need for DevOps 3. An overview of Cloud Computing 4. Azure Boards 5. Azure Repos 6. Microsoft Azure Cloud 7. Microsoft Azure Cloud: IaaS and PaaS 8. Azure Pipelines: Continuous Integration and Continuous Delivery 9. Azure Pipelines Implementation

Implementing DevOps with Microsoft Azure

Systems, Software and Services Process Improvement

Enterprise Cloud epUB _1

Professional Application Lifecycle Management with Visual Studio 2013

DevOps Bootcamp

Hands-on Cloud Analytics with Microsoft Azure Stack