

Azure Stack Azure Microsoft

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.

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 between decoupled 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 Wali Implementing Azure Solutions - Second Edition by Florian Klaffenbach, Oliver Michalski, Markus Klein Microservices with Azure by Namit 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.

Step-by-step exam guide to learn Microsoft Azure Administration with hands-on labs. KEY FEATURES Well-organized and detailed coverage for passing the Azure Administrator Exam. Gain proficiency in analyzing resource utilization and consumption. Explore how to manage resource groups and establish storage accounts. Expert-led designed and scenario-focused questions and answers. DESCRIPTION The Azure administrator is a new way to learn and develop the Microsoft Azure skills, and it helps you to grow your career in the cloud era. In this book, you will learn about the basic and advance concepts of the Azure administration. You will also learn how to use the Azure active directory user management and how to sync your on-premises active directory with the Azure directory. This book also explains concepts like the Azure Virtual machine, Azure storage account, and Azure networking with an exam-based scenario. At the end the book explains Azure monitor, Azure networking, on-premises to Azure connectivity using the site-to-site connection or through EXPRESS ROUTE along with the Disaster and Backup recovery option. This book covers a full chapter of Exam Preparation Guidelines and scenarios-based questions that will help readers in their exam preparations. WHAT YOU WILL LEARN Efficient use of Azure components with conceptual-based learning on Azure services. Step-by-step implementation of routine Azure administration tasks. Exciting examples and illustrations on using Azure active directory and other utilities. Smart coverage on Azure virtual machine, Azure storage account, and Azure networking. WHO THIS BOOK IS FOR This book is for all system administration roles or anyone seeking to successfully pass the Azure Administration certification exam and become a true professional Azure Administrator. To make the best of this book, we expect you to be familiar with PowerShell and CLI. TABLE OF CONTENTS 1.Implement and manage the hybrid identities 2.Managing Role assignment through the RBAC Policy 3.Azure Subscription and Resources Group Management 4.Managing and Configuration of the Storage Accounts 5.Manage data in the Azure Storage 6.Configure the Azure File 7.Create and configure a VM 8.Automate the deployment of the VMs 9.Create and configure the containers 10.Create and configure the Web Apps 11.Configure the Virtual Networking and Integrate an on-premises to the Azure Network 12.Configure the load balancing 14.Secure access to the virtual networks 15.Monitor and troubleshoot virtual networking 16.Analyze resource utilization and consumption 17.Implement backup and recovery 18.Exam Guidelines and Assessment

Your roadmap to Microsoft Azure Azure is Microsoft's flagship cloud computing platform. With over 600 services

available to over 44 geographic regions, it would take a library of books to cover the entire Azure ecosystem. Microsoft Azure For Dummies offers a shortcut to getting familiar with Azure's core product offerings used by the majority of its subscribers. It's a perfect choice for those looking to gain a quick, basic understanding of this ever-evolving public cloud platform. Written by a Microsoft MVP and Microsoft Certified Azure Solutions Architect, Microsoft Azure For Dummies covers building virtual networks, configuring cloud-based virtual machines, launching and scaling web applications, migrating on-premises services to Azure, and keeping your Azure resources secure and compliant. Migrate your applications and services to Azure with confidence Manage virtual machines smarter than you've done on premises Deploy web applications that scale dynamically to save you money and effort Apply Microsoft's latest security technologies to ensure compliance to maintain data privacy With more and more businesses making the leap to run their applications and services on Microsoft Azure, basic understanding of the technology is becoming essential. Microsoft Azure For Dummies offers a fast and easy first step into the Microsoft public cloud.

Cloud Debugging and Profiling in Microsoft Azure

Microsoft Hybrid Cloud Unleashed with Azure Stack and Azure

Building hybrid cloud, IaaS, and PaaS solutions

Hands-on Cloud Analytics with Microsoft Azure Stack

Simplified cloud concepts and core Azure fundamentals for absolute beginners to pass the AZ-900 exam

Application Delivery and Load Balancing in Microsoft Azure

Maximize storage efficiency, performance, and security using System Center LTSC and SAC releases

Get the definitive guide on designing applications on the Microsoft application platform—straight from the Microsoft patterns & practices team. Learn how to choose the most appropriate architecture and the best implementation technologies that the Microsoft application platform offers applications developers. Get critical design recommendations and guidelines organized by application type—from Web, mobile, and rich Internet applications to Office Business Applications. You'll also get links to additional technical resources that can help with your application development.

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.

Develop a solid understanding of cloud computing, Linux virtual machine, 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.

Bring the benefits of Azure Pack to your cloud service and discover the secrets of enterprise class solutions About This Book Build, deploy and manage cloud solutions using combination of Windows Azure Pack, System Center and Hyper-V Impress your peers at work by learning to build applications that can leverage the cloud to meet the needs of your organization Get overall view about the functionalities of Azure Pack and understand how to build cloud fabric, IaaS, PaaS, DBaaS offerings Who This Book Is For This book targets cloud and virtualization professionals willing to get hands-on exposure to Windows Azure Pack. It will help virtualization customers adopt cloud architecture and would also help existing cloud providers to understand the benefits of Azure Pack. This book will also be of use to cloud professionals from other platforms such as VMware/OpenStack to appreciate and evaluate Azure Pack. What You Will Learn Learn about Windows Azure Pack architecture Get Cloud Fabric ready and then plan, install and configure Windows Azure Pack solution Build VM clouds and IaaS offerings for private Cloud and service provider's Cloud solutions. Learn about planning and deployment of three Cloud services models of WAP - IaaS, PaaS(WebSites, Service Bus), DBaaS(SQL, MySQL) Plan and manage Azure Pack plans, subscriptions and add on's for tenants Experience the solution built from tenant or customer point of view. Integrate Azure Pack with Service Management Automation(SMA) to automate your cloud Solution Extend your Azure Pack capabilities and integrate it with other vendors or solutions components such as VMware, Cloud Cruiser, etc. In Detail Windows Azure Pack is an on-premises cloud solution by Microsoft, which can be leveraged by Organizations and Services providers for building an enterprise class cloud solution. WAP provides consistent experience to Microsoft Azure, along with capabilities such as multi-tenancy, high density, self-service,

automated. WAP can be leveraged to provide both IaaS & PaaS Offerings to internal and external customers. In this book, we will learn about planning and deployment of Cloud Fabric for Windows Azure Pack, Azure Pack components, VM Clouds and IaaS offerings, PaaS Offering including Websites & Service Bus, DBaaS offerings, Automation with SMA, and extending capabilities with third party products integration and tenant experience for all services. Style and approach This book is a step by step guide accompanied by extensive screenshots to help existing cloud professionals understand what value Azure Pack can add in their cloud services and how it can be deployed.

Microsoft Application Architecture Guide

Microsoft Azure For Dummies

Build and manage ETL and ELT pipelines with Microsoft Azure's serverless data integration service

Patterns and Paradigms for Scalable, Reliable Services

Designing Cloud Solutions

Programming Microsoft Azure Service Fabric

Briggs

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.

Leverage Azure's cloud capabilities to find the most optimized path to meet your firm's cloud infrastructure needs Key Features Get to grips with the core Azure infrastructure technologies and solutions Develop the ability to opt for cloud design and architecture that best fits your organization Cover the entire spectrum of cloud migration from planning to implementation and best practices Book Description Microsoft Azure is a powerful cloud computing platform that offers a multitude of services and capabilities for organizations of any size moving to a cloud strategy. This fourth edition comes with the latest updates on cloud security fundamentals, hybrid cloud, cloud migration, Microsoft Azure Active Directory, and Windows Virtual Desktop. It encapsulates the entire spectrum of measures involved in Azure deployment that includes understanding Azure fundamentals, choosing a suitable cloud architecture, building on design principles, becoming familiar with Azure DevOps, and learning best practices for optimization and management. The book begins by introducing you to the Azure cloud platform and demonstrating the substantial scope of digital transformation and innovation that can be achieved with Azure's capabilities. The guide also acquaints you with practical insights into application modernization, Azure Infrastructure as a Service (IaaS) deployment, infrastructure management, key application architectures, best practices of Azure DevOps, and Azure automation. By the end of this book, you will have acquired the skills required to drive Azure operations from the planning and cloud migration stage to cost management and troubleshooting. What you will learn Understand core Azure infrastructure technologies and solutions Carry out detailed planning for migrating applications to the cloud with Azure Deploy and run Azure infrastructure services Define roles and responsibilities in DevOps Get a firm grip on Azure security fundamentals Carry out cost optimization in Azure Who this book is for This book is designed to benefit Azure architects, cloud solution architects, Azure developers, Azure administrators, and anyone who wants to develop expertise in operating and administering the Azure cloud. Basic familiarity with operating systems and databases will help you grasp the concepts covered in this book.

We're thrilled to share another free ebook with you: Introducing Microsoft Azure HDInsight, by Avkash Chauhan, Valentine Fontana, Michele Hart, Wee Hyong Tok, and Buck Woody. Here are the download links: Download the PDF (6.37 MB; 130 pages) from <http://aka.ms/IntroHDInsight/PDF> Download the EPUB (8.46 MB) from <http://aka.ms/IntroHDInsight/EPUB> Download the MOBI (12.8 MB) from <http://aka.ms/IntroHDInsight/MOBI> Download the code samples (6.83 KB) from

<http://aka.ms/IntroHDInsight/CompContent> Get a head start evaluating Windows Azure - with technical insights from a Microsoft MVP Mitch Tulloch. This guide introduces the latest features and capabilities, with scenario-based advice on how the platform can meet the needs of your business. Get the high-level overview you need to begin preparing your deployment now. Topics include: Understanding Windows Azure Windows Azure Compute Services Windows Azure Network Services Windows Azure Data Services Windows Azure App Services Getting Started with Windows Azure

On Premise or in the Cloud ? Are interdependent service providers (for example, fuel suppliers, telecommunications providers, meter data processors) included in risk assessments? Would you choose to renew a contract with this vendor? Should they be granted the same legal access to records and other data as their counterparts? Have you acknowledged risks of reliability; how can IT departments ensure that the business can access its applications? Defining, designing, creating, and implementing a process to solve a challenge or meet an objective is the most valuable role... In EVERY group, company, organization and department. Unless you are talking a one-time, single-use project, there should be a process. Whether that process is managed and implemented by humans, AI, or a combination of the two, it needs to be designed by someone with a complex enough perspective to ask the right questions. Someone capable of asking the right questions and step back and say, 'What are we really trying to accomplish here? And is there a different way to look at it?' This Self-Assessment empowers people to do just that - whether their title is entrepreneur, manager, consultant, (Vice-)President, CxO etc... - they are the people who rule the future. They are the person who asks the right questions to make Microsoft Azure Stack investments work better. This Microsoft Azure Stack All-Inclusive Self-Assessment enables You to be that person. All the tools you need to an in-depth Microsoft Azure Stack Self-

Assessment. Featuring 885 new and updated case-based questions, organized into seven core areas of process design, this Self-Assessment will help you identify areas in which Microsoft Azure Stack improvements can be made. In using the questions you will be better able to: - diagnose Microsoft Azure Stack projects, initiatives, organizations, businesses and processes using accepted diagnostic standards and practices - implement evidence-based best practice strategies aligned with overall goals - integrate recent advances in Microsoft Azure Stack and process design strategies into practice according to best practice guidelines Using a Self-Assessment tool known as the Microsoft Azure Stack Scorecard, you will develop a clear picture of which Microsoft Azure Stack areas need attention. Your purchase includes access details to the Microsoft Azure Stack self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows your organization exactly what to do next. You will receive the following contents with New and Updated specific criteria: - The latest quick edition of the book in PDF - The latest complete edition of the book in PDF, which criteria correspond to the criteria in... - The Self-Assessment Excel Dashboard - Example pre-filled Self-Assessment Excel Dashboard to get familiar with results generation - In-depth and specific Microsoft Azure Stack Checklists - Project management checklists and templates to assist with implementation **INCLUDES LIFETIME SELF ASSESSMENT UPDATES** Every self assessment comes with Lifetime Updates and Lifetime Free Updated Books. Lifetime Updates is an industry-first feature which allows you to receive verified self assessment updates, ensuring you always have the most accurate information at your fingertips.

Microsoft Azure

Building Clouds with Windows Azure Pack

Building Cloud Apps with Microsoft Azure

Introducing Windows Azure for IT Professionals

Microsoft Azure Stack a Complete Guide - 2019 Edition

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

Microsoft Azure Fundamentals Certification and Beyond

Gain in-depth knowledge of Azure fundamentals that will make it easy for you to achieve AZ-900 certification Key Features Get

fundamental knowledge of cloud concepts and the Microsoft Azure platform Explore practical exercises to gain experience of working with the Microsoft Azure platform in the real world Prepare to achieve AZ-900 certification on the first go with the help of simplified examples covered in the book Book Description This is the digital and cloud era, and Microsoft Azure is one of the top cloud computing platforms. It's now more important than ever to understand how the cloud functions and the different services that can be leveraged across the cloud. This book will give you a solid understanding of cloud concepts and Microsoft Azure, starting by taking you through cloud concepts in depth, then focusing on the core Azure architectural components, solutions, and management tools. Next, you will understand security concepts, defense-in-depth, and key security services such as Network Security Groups and Azure Firewall, as well as security operations tooling such as Azure Security Center and Azure Sentinel. As you progress, you will understand how identity, governance, privacy, and compliance are managed in Azure. Finally, you will get to grips with cost management, service-level agreements, and service life cycles. Throughout, the book features a number of hands-on exercises to support the concepts, services, and solutions discussed. This provides you with a glimpse of real-world scenarios, before finally concluding with practice questions for AZ-900 exam preparation. By the end of this Azure book, you will have a thorough understanding of cloud concepts and Azure fundamentals, enabling you to pass the AZ-900 certification exam easily. What you will learn Explore cloud computing with Azure cloud Gain an understanding of the core Azure architectural components Acquire knowledge of core services and management tools on Azure Get up and running with security concepts, security operations, and protection from threats Focus on identity, governance, privacy, and compliance features Understand Azure cost management, SLAs, and service life cycles Who this book is for This Azure fundamentals book is both for those with technical backgrounds and non-technical backgrounds who want to learn and explore the field of cloud computing, especially with Azure. This book will also help anyone who wants to develop a good foundation for achieving advanced Azure certifications. There is no prerequisite for this book except a willingness to learn and explore cloud concepts and Microsoft Azure.

Microsoft Azure Essentials from Microsoft Press is a series of free ebooks designed to help you advance your technical skills with Microsoft Azure. The first ebook in the series, Microsoft Azure Essentials: Fundamentals of Azure, introduces developers and IT professionals to the wide range of capabilities in Azure. The authors - both Microsoft MVPs in Azure - present both conceptual and how-to content for key areas, including: Azure Websites and Azure Cloud Services Azure Virtual Machines Azure Storage Azure Virtual Networks Databases Azure Active Directory Management tools Business scenarios Watch Microsoft Press's blog and Twitter (@MicrosoftPress) to learn about other free ebooks in the "Microsoft Azure Essentials" series.

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's performance in the cloud and for debugging the issues accordingly

Master the art of efficiently composing Azure services and implement them in real-world scenarios About This Book Build an effective development environment in Azure using the right set of technologies. Architect a full-stack solution in the cloud to choose the best service set A comprehensive guide full of real-life examples to help you take your developer skills up a notch Who This Book Is For If you are a developer, a full-stack developer, or an architect with an intermediate level understanding of cloud computing and Microsoft Azure, and you want to take your skills up a notch, this book is for you. Prior knowledge and understanding of cloud development strategies is assumed.

What You Will Learn Set up a development environment with VMs, ARM, and RemoteApp Connect with VPNs to manage security and backups Establish a front-end architecture with AppService, storage, search, and caching Implement identity solutions, integrate applications, and use data Integrate cross-platform mobile applications with the cloud Consistently build and manage an API layer for millions of users Work with messages in the enterprise Deploy your services as an IT expert with ARM templates In Detail Microsoft Azure is a cloud computing platform that supports many different programming languages, tools, and frameworks, including both Microsoft-specific and third-party software and systems. This book starts by helping you set up a professional development environments in the cloud and integrating them with your local environment to achieve improved efficiency. You will move on to create front-end and back-end services, and then build cross-platform applications using Azure. Next you'll get to grips with advanced techniques used to analyze usage data and automate billing operations. Following on from that, you will gain knowledge of how you can extend your on-premise solution to the cloud and move data in a pipeline. In a nutshell, this book will show you how to build high-quality, end-to-end services using Microsoft Azure. By the end of this book, you will have the skillset needed to successfully set up, develop, and manage a full-stack Azure infrastructure. Style and Approach This comprehensive guide to Azure has both explorative parts and step-by-step ones. Each chapter defines a learning path to a specific scenario, mixing the appropriate technologies and building blocks efficiently.

Azure Arc-Enabled Kubernetes and Servers

Transform your software deployment process with Microsoft Azure

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

Microsoft Private Cloud Computing

Implementing Azure: Putting Modern DevOps to Use

Azure Strategy and Implementation Guide

Implementing Hybrid Cloud with Azure Arc

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 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 clouds 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.

How much does Microsoft Azure Stack help? How do you manage and improve your Microsoft Azure Stack work systems to deliver customer value and achieve organizational success and sustainability? What threat is Microsoft Azure Stack addressing? What are the short and long-term Microsoft Azure Stack goals? How do you assess your Microsoft Azure Stack workforce capability and capacity needs, including skills, competencies, and staffing levels? This powerful Microsoft Azure Stack self-assessment will make you the trusted Microsoft Azure Stack domain auditor by revealing what you need to know to be fluent and ready for any Microsoft Azure Stack challenge. How do I reduce the effort of Microsoft Azure Stack work to be done to get problems solved? How can I ensure that plans of action include every Microsoft Azure Stack task and that every Microsoft Azure Stack outcome is in place? How will I save time investigating strategic and tactical options and ensuring Microsoft Azure Stack costs are low? How can I deliver tailored Microsoft Azure Stack advice instantly with structured going-forward plans? There's no better guide through these mind-expanding questions than acclaimed best-selling author Gerard Blokdyk. Blokdyk ensures all Microsoft Azure Stack essentials are covered, from every angle: the Microsoft Azure Stack self-assessment shows succinctly and clearly that what needs to be clarified to organize the required activities and processes so that Microsoft Azure Stack outcomes are achieved. Contains extensive criteria grounded in past and current successful projects and activities by experienced Microsoft Azure Stack practitioners. Their mastery, combined with the easy elegance of the self-assessment, provides its superior value to you in knowing how to ensure the outcome of any efforts in Microsoft Azure Stack are maximized with professional results. Your purchase includes access details to the Microsoft Azure Stack self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows you exactly what to do next. Your exclusive instant access details can be found in your book. You will receive the following contents with New and Updated specific criteria: - The latest quick edition of the book in PDF - The latest complete edition of the book in PDF, which criteria correspond to the criteria in... - The Self-Assessment Excel Dashboard, and... - Example pre-filled Self-Assessment Excel Dashboard to get familiar with results generation ...plus an extra, special, resource that helps you with project managing. **INCLUDES LIFETIME SELF ASSESSMENT UPDATES** Every self assessment comes with Lifetime Updates and Lifetime Free Updated Books. Lifetime Updates is an industry-first feature which allows you to receive verified self assessment updates, ensuring you always have the most accurate information at your fingertips.

Bring the power of Microsoft Azure Hybrid Cloud technology to your datacenter. About This Book Build and deploy software-defined infrastructures and deliver Azure-based IaaS and PaaS services in your datacenter Use Azure Stack leverage your current infrastructure with Microsoft Hybrid Cloud and get the best of both worlds Unlock greater performance and flexibility and save your organization money, time, and resources Who This Book Is For The book is for administrators and architects who are planning to implement or administer a hybrid cloud infrastructure using Microsoft Cloud Technology. This book is ideal for those who are looking forward to implement and run a hybrid cloud infrastructure with PaaS, SaaS and IaaS services. What You Will Learn Gain a clear understanding of Azure Stack design Set up storage, network and compute services in Azure Stack Implement and run a hybrid cloud infrastructure with PaaS, SaaS, and IaaS services Get an overview of the automation options in Azure Stack Integrate Azure public services such as multi-factor authentication and Azure AD with Azure Stack Learn about the services available in the future In Detail Azure Stack is all about creating fewer gaps between on-premise and public cloud application deployment. Azure Stack is the next logical evolution of Microsoft Cloud Services to create a true Hybrid Cloud-ready application. This book provides an introduction to Microsoft Azure Stack and the Cloud First Approach. Starting with an introduction to Microsoft Azure Stack Architecture, the book will help you plan and deploy your Microsoft Azure Stack. Next, you will learn about the Network and Storage option in Microsoft Azure Stack and you'll create your own private cloud solution. Finally, you will understand how to integrate Public Cloud Services with Microsoft Azure Stack and extend it using the 3rd Party Resource Provider. After reading the book, you will have a good understanding of an end-to-end process for designing, implementing, offering, and supporting cloud solutions for enterprises or service providers. Style and approach This book is a practical guide to help you unlock a hybrid cloud stack using Azure Stack. Using a straightforward and easy to implement approach, this book guides you through the basic planning for a hybrid cloud stack, describes the infrastructure technologies Azure Stack is based on, and explains how to deploy and administer an Azure Stack-based infrastructure.

Get started with the private cloud platform, Microsoft Azure Stack. This course offers system administrators a high-level overview of features and deployment use cases.

Kubernetes: Up and Running

Building Microservices Applications on Microsoft Azure

Microsoft System Center Data Protection Manager Cookbook

Building Hybrid Clouds with Azure Stack

Microsoft Azure Security Center

Make Your Career with Microsoft Azure Platform Using Azure Administered Exam Prep (English Edition)

Microsoft Azure Infrastructure Services for Architects

Prepare for the newest versions of Microsoft Exam 70-533-and help demonstrate your real-world mastery of implementing Microsoft Azure Infrastructure as a Service (IaaS). Designed for experienced IT professionals ready to advance their status, Exam Ref focuses on the critical thinking and decision-making acumen needed for success at the MCSA level. Focus on the expertise measured by these objectives: Design and implement Azure App Service Apps Create and manage compute resources, and implement containers Design and implement a storage strategy, including storage encryption Implement virtual networks, including new techniques for hybrid connections Design and deploy ARM Templates Manage Azure security and Recovery Services Manage Azure operations, including automation and data analysis Manage identities with Azure AD Connect Health, Azure AD Domain Services, and Azure AD single sign on This Microsoft Exam Ref: Organizes its coverage by exam objectives Features strategic, what-if scenarios to challenge you Assumes you are an IT professional with experience implementing and monitoring cloud and hybrid solutions and/or supporting application lifecycle management This book covers the 533 objectives as of December 2017. If there are updates for this book, you will find them at <https://aka.ms/examref5332E/errata>. About the Exam Exam 70-533 focuses on skills and knowledge for provisioning and managing services in Microsoft Azure, including: implementing infrastructure components such as virtual networks, virtual machines, containers, web and mobile apps, and storage; planning and managing Azure AD, and configuring Azure AD integration with on-premises Active Directory domains. About Microsoft Certification Passing this exam helps qualify you for MCSA: Cloud Platform Microsoft Certified Solutions Associate certification, demonstrating your expertise in applying Microsoft cloud technologies to reduce costs and deliver value. To earn this certification, you must also pass any one of the following exams: 70-532 Developing Microsoft Azure Solutions, or 70-534 Architecting Microsoft Azure Solutions, or 70-535, Architecting Microsoft Azure Solutions, or 70-537: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack.

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 pick up valuable skills immediately 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 client/server 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

An expert guide for IT administrators needing to create and manage a public cloud and virtual network using Microsoft Azure With Microsoft Azure challenging Amazon Web Services (AWS) for market share, there has been no better time for IT professionals to broaden and expand their knowledge of Microsoft's flagship virtualization and cloud computing service. *Microsoft Azure Infrastructure Services for Architects: Designing Cloud Solutions* helps readers develop the skills required to understand the capabilities of Microsoft Azure for Infrastructure Services and implement a public cloud to achieve full virtualization of data, both on and off premise. Microsoft Azure provides granular control in choosing core infrastructure components, enabling IT administrators to deploy new Windows Server and Linux virtual machines, adjust usage as requirements change, and scale to meet the infrastructure needs of their entire organization. This accurate, authoritative book covers topics including IaaS cost and options, customizing VM storage, enabling external connectivity to Azure virtual machines, extending Azure Active Directory, replicating and backing up to Azure, disaster recovery, and much more. New users and experienced professionals alike will: Get expert guidance on understanding, evaluating, deploying, and maintaining Microsoft Azure environments from Microsoft MVP and technical specialist John Savill Develop the skills to set up cloud-based virtual machines, deploy web servers, configure hosted data stores, and use other key Azure technologies Understand how to design and implement serverless and hybrid solutions Learn to use enterprise security guidelines for Azure deployment Offering the most up to date information and practical advice, *Microsoft Azure Infrastructure Services for Architects: Designing Cloud Solutions* is an essential resource for IT administrators, consultants and engineers responsible for learning, designing, implementing, managing, and maintaining Microsoft virtualization and cloud technologies. A practical guide that enhances your skills in implementing Azure solutions for your organization About This Book Confidently configure, deploy, and manage cloud services and virtual machines Implement a highly-secured environment and respond to threats with increased visibility This comprehensive guide is packed with exciting practical scenarios that enable you to implement Azure solutions with ease Who This Book Is For This book is for IT architects, system and network admins, and DevOps engineers who are aware of Azure solutions and want to implement them for their organization. What You Will Learn Implement virtual networks, network gateways, Site-to-Site VPN, ExpressRoute, routing, and network devices Understand the working of different storage accounts in Azure Plan, deploy, and secure virtual machines Deploy and manage Azure Containers Get familiar with some common Azure usage scenarios In Detail Microsoft Azure has numerous effective solutions that shape the future of any business. However, the major challenge that architects and administrators face are implementing these solutions appropriately. Our book focuses on various implementation scenarios that will help overcome the challenge of implementing Azure's solutions in a very efficient manner and will also help you to prepare for Microsoft Architect exam. You will not only learn how to secure a newly deployed Azure Active Directory but also get to know how Azure Active Directory Synchronization could be implemented. To maintain an isolated and secure environment so that you can run your virtual machines and applications, you will implement Azure networking services. Also to manage, access, and secure your confidential data, you will implement storage solutions. Toward the end, you will explore tips and tricks to secure your environment. By the end, you will be able to implement Azure solutions such as networking, storage, and cloud effectively. Style and approach This step-by-step guide focuses on implementing various Azure solutions for your organization. The motive is to provide a comprehensive exposure and ensure they can implement these solutions with ease.

Designing, Developing, Deploying, and Monitoring

Transform Your Data to Derive Powerful Insights Using Microsoft Azure

DevOps on the Microsoft Azure Stack : VSTS and TFS 2018

Application Performance Management in the Cloud

Azure Stack Hub Demystified

Microsoft Azure Stack First Look

Dive into the Future of Infrastructure

Learn the foundation of cloud computing and how to build your own Microsoft private cloud Written by a team of expert authors who are MVPs and leaders in their respective fields, this one-of-a-kind book is an essential resource for IT administrators who are responsible for implementing and managing a cloud infrastructure. You'll quickly learn how cloud computing offers significant cost savings while also providing new levels of speed and agility. Serving as a how-to guide, Microsoft Private Cloud Computing walks you through building a secure, internal cloud and delivering it as a service to your company using Microsoft Windows Server Hyper-V and Microsoft System Center Virtual Machine Manager 2012. Walks you through the entire process: understanding cloud computing, understanding the Microsoft concept of a private cloud, deploying a private cloud fabric, deploying services, and building a private cloud, as well as integrating it with Microsoft's public cloud to create a cross-premises or public cloud Discusses fabric management with System Center Virtual Machine Manager (VMM) 2012 Examines how to provide network and storage with VMM 2012 Looks at the VMM library configuration Discusses private cloud and cloud service management with Microsoft App Controller Microsoft Private Cloud Computing is a must-have comprehensive resource that covers all aspects of implementing a private cloud.

Straight talking advice on how to design and build enterprise applications for the cloud using Microsoft Azure with this book and eBook.

Build exceptionally scalable cloud applications for fast-growing businesses Microsoft Azure Service Fabric makes it easier than ever before to build large-scale distributed cloud applications. You can quickly develop and update microservice-based applications, efficiently operate highly reliable hyperscale services, and deploy the same application code on public, hosted, or private clouds. This book introduces all key Azure Service Fabric concepts and walks you through implementing several real-world applications. You'll find advanced design patterns, tuning tips, and lessons learned from early adopters—all from the perspective of developing and operating large projects in production. Microsoft Azure evangelist Haishi Bai shows how to: Implement background services and use stateless services to handle user requests Solve state-management problems in distributed systems Package, stage, and deploy applications Upgrade applications in place, with zero downtime Leverage Quality of Service (QoS) options throughout app design, implementation, and operation Manage Service Fabric clusters with Windows PowerShell and the Management Portal Configure Service Fabric Diagnostics and analyze collected data Test functionality and performance Design Internet of Things (IoT) solutions that capture and manage petabytes of data Handle demanding real-time data-streaming compute scenarios Understand multitenancy and single-tenancy as logical architecture choices Build Service Fabric game engines to support large-scale, multiplayer online games Model complex systems with the Service Fabric Actors Pattern About This Book For all cloud developers who want to create and operate large-scale distributed cloud applications by using Microsoft Azure Service Fabric For all IT professionals who want to integrate Windows Server and Microsoft Azure in any environment, including datacenters

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.

Enterprise Cloud epUB _1

Learn Azure in a Month of Lunches, Second Edition

Mastering Cloud Development using Microsoft Azure

Explore the new-generation hybrid cloud and learn how to build Azure Arc-enabled solutions

Exam Ref 70-533 Implementing Microsoft Azure Infrastructure Solutions

Enterprise Application Development

WinOps

Over 60 recipes to achieve a robust and advanced backup and recovery solution leveraging SCDPM Key Features Adapt to the modern data center design challenges and improve storage efficiency Effective recipes to help you create your own robust architectural designs Solve data protection and recovery problems in your organization Book Description System Center Data Protection Manager (SCDPM) is a robust enterprise backup and recovery system that contributes to your BCDR strategy by facilitating the backup and recovery of enterprise data. With an increase in data recovery and protection problems faced in organizations, it has become important to keep data safe and recoverable. This book contains recipes that will help you upgrade to SCDPM and it covers the advanced features and functionality of SCDPM. This book starts by helping you install SCDPM and then moves on to post-installation and management tasks. You will come across a lot of useful recipes that will help you recover your VMware and Hyper-V VMs. It will also walk you through tips for monitoring SCDPM in different scenarios. Next, the book will also offer insights into protecting windows workloads followed by best practices on SCDPM. You will also learn to back up your Azure Stack Infrastructure using Azure Backup. You will also learn about recovering data from backup and implementing disaster recovery. Finally, the book will show you how to configure the protection groups to enable online protection and troubleshoot Microsoft Azure Backup Agent. What you will learn Install and prepare SQL Server for the SCDPM database Reduce backup storage with SCDPM and data deduplication Learn about the prerequisites for supported Hyper-V Server protection Integrate SCDPM with other System Center products to build optimal services Protect and restore the SCDPM database Protect your data center by integrating SCDPM with Azure Backup Manually create online recovery points and recover production data from Azure Protect and learn about the requirements to recover Azure Stack with SCDPM Who this book is for If you are an SCDPM administrator, this book will help you verify your knowledge and provide you with everything you need to know about the new release of System Center Data Protection Manager. 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.

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 deep dive into ingestion technologies. You will learn about Data processing services in Azure. You will next 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

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

Microsoft Azure Administrator Exam Prep (AZ-104)

Microsoft Azure Stack Standard Requirements

The essential handbook to cloud transformation with Azure, 4th Edition

Extending Hyperscale Cloud Management to Your Datacenter

Hands-On Linux Administration on Azure

Microsoft Azure Essentials Azure Web Apps for Developers

Azure Stack Hub Demystified Building hybrid cloud, IaaS, and PaaS solutions Packt Publishing Ltd

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 ITIL and DevOps lifecycles to your hybrid cloud implementation Gain a deep understanding of Azure Stack architecture, components, and internals Install 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 Implement microservices starting with their architecture and moving on to their deployment, manageability, security, and monitoring. This book focuses on the key scenarios where microservices architecture is preferred over a monolithic architecture. Building Microservices Applications on Microsoft Azure begins with a survey of microservices architecture compared to monolithic architecture and covers microservices implementation in detail. You'll see the key scenarios where microservices architecture is preferred over a monolithic approach. From there, you will explore the critical components and various deployment options of microservices on platforms such as Microsoft Azure (public cloud) and Azure Stack (hybrid cloud). This includes in-depth coverage of developing, deploying, and monitoring microservices on containers and orchestrating with Azure Service Fabric and Azure Kubernetes Cluster (AKS). This book includes practical experience from large-scale enterprise deployments, therefore it can be a quick reference for solution architects and developers to understand the critical factors while designing a microservices application. What You Will Learn Explore the use cases of microservices and monolithic architecture Discover the architecture patterns to build scalable, agile, and secure microservices applications Develop and deploy microservices using Azure Service Fabric and Azure Kubernetes Service Secure microservices using the gateway pattern See the deployment options for Microservices on Azure Stack Implement database patterns to handle the complexities introduced by microservices Who This Book Is For Architects and consultants who work on Microsoft Azure and manage large-scale deployments.

With more and more companies moving on-premises applications to the cloud, software and cloud solution architects alike are busy investigating ways to improve load balancing, performance, security, and high availability for workloads. This practical book describes Microsoft Azure's load balancing options and explains how NGINX can contribute to a comprehensive solution. Cloud architects Derek DeJonghe and Arlan Nugara take you through the steps necessary to design a practical solution for your network. Software developers and technical managers will learn how these technologies have a direct impact on application development and architecture. While the examples are specific to Azure, these load balancing concepts and implementations also apply to cloud providers such as AWS, Google Cloud, DigitalOcean, and IBM Cloud. Understand application delivery and load balancing--and why they're important Explore Azure's managed load balancing options Learn how to run NGINX OSS and NGINX Plus on Azure Examine similarities and complementing features between Azure-managed solutions and NGINX Use Azure Front Door to define, manage, and monitor global routing for your web traffic Monitor application performance using Azure and NGINX tools and plug-ins Explore security choices using NGINX and Azure Firewall solutions

Azure Data Factory Cookbook

Designing Distributed Systems

Implementing Azure Solutions

Microsoft Azure Essentials - Fundamentals of Azure

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

Accelerate hybrid cloud innovation using Azure Arc with the help of real-world scenarios and examples Key Features Get to grips with setting up and working with Azure Arc Harness the power of Azure Arc and its integration with cutting-edge technologies such as Kubernetes and PaaS data services Manage, govern, and monitor your on-premises servers and applications with Azure Book Description With all the options available for deploying infrastructure on multi-cloud platforms and on-premises comes the complexity of managing it, which is adeptly handled by Azure Arc. This book will show you how you can manage environments across platforms without having to migrate workloads from on-premises or multi-cloud to Azure every time. Implementing Hybrid Cloud with Azure Arc starts with an introduction to Azure Arc and hybrid cloud computing, covering use cases and various supported topologies. You'll learn to set up Windows and Linux servers as Arc-enabled machines and get to grips with deploying applications on Kubernetes clusters with Azure Arc and GitOps. The book then demonstrates how to onboard an on-premises SQL Server infrastructure as an Arc-enabled SQL Server and deploy and manage a hyperscale PostgreSQL infrastructure on-premises through Azure Arc. Along with deployment, the book also covers security, backup, migration, and data distribution aspects. Finally, it shows you how to deploy and manage Azure's data services on your own private cloud and explore multi-cloud solutions with Azure Arc. By the end of this book, you'll have a firm understanding of Azure Arc and how it interacts with various cutting-edge technologies such as Kubernetes and PaaS data services. What you will learn Set up a fully functioning Azure Arc-managed environment Explore products and

services from Azure that will help you to leverage Azure Arc Understand the new vision of working with on-premises infrastructure Deploy Azure's PaaS data services on-premises or on other cloud platforms Discover and learn about the technologies required to design a hybrid and multi-cloud strategy Implement best practices to govern your IT infrastructure in a scalable model Who this book is for This book is for Cloud IT professionals (Azure and/or AWS), system administrators, database administrators (DBAs), and architects looking to gain clarity about how Azure Arc works and how it can help them achieve business value. Anyone with basic Azure knowledge will benefit from this book.

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

With the help of well-structured and practical recipes, this book will teach you how to integrate data from the cloud and on-premise. You ' ll learn how to transform, clean, and consolidate data into a single data platform and get to grips with using ADF as the main ETL and orchestration tool for your data warehouse or data platform project.