FILE GAUTAM SHROFF ENTERPRISE CLOUD COMPUTING

Enterprise Cloud Computing

Cloud computing promises to revolutionize IT and business by making computing available as a utility over the internet. This book is intended primarily for practising software architects who need to assess the impact of such a transformation. It explains the evolution of the internet into a cloud computing platform, describes emerging development paradigms and technologies, and discusses how these will change the way enterprise applications should be architected for cloud deployment. Gautam Shroff provides a technical description of cloud computing technologies, covering cloud infrastructure and platform services, programming paradigms such as MapReduce, as well as 'do-it-yourself' hosted development tools. He also describes emerging technologies critical to cloud computing. The book also covers the fundamentals of enterprise computing, including a technical introduction to enterprise architecture, so it will interest programmers aspiring to become software architects and serve as a reference for a graduate-level course in software architecture or software engineering.

The Intelligent Web

As we use the Web for social networking, shopping, and news, we leave a personal trail. These days, linger over a Web page selling lamps, and they will turn up at the advertising margins as you move around the Internet, reminding you, tempting you to make that purchase. Search engines such as Google can now look deep into the data on the Web to pull out instances of the words you are looking for. And there are pages that collect and assess information to give you a snapshot of changing political opinion. These are just basic examples of the growth of \"Web intelligence\

Cloud Computing Synopsis and Recommendations

This document reprises the NIST-established definition of cloud computing, describes cloud computing benefits and open issues, presents an overview of major classes of cloud technology, and provides guidelines and recommendations on how organizations should consider the relative opportunities and risks of cloud computing. Cloud computing has been the subject of a great deal of commentary. Attempts to describe cloud computing in general terms, however, have been problematic because cloud computing is not a single kind of system, but instead spans a spectrum of underlying technologies, configuration possibilities, service models, and deployment models. This document describes cloud systems and discusses their strengths and weaknesses.

Cloud Computing: A Practical Approach

\"The promise of cloud computing is here. These pages provide the 'eyes wide open' insights you need to transform your business.\" --Christopher Crowhurst, Vice President, Strategic Technology, Thomson Reuters A Down-to-Earth Guide to Cloud Computing Cloud Computing: A Practical Approach provides a comprehensive look at the emerging paradigm of Internet-based enterprise applications and services. This accessible book offers a broad introduction to cloud computing, reviews a wide variety of currently available solutions, and discusses the cost savings and organizational and operational benefits. You'll find details on essential topics, such as hardware, platforms, standards, migration, security, and storage. You'll also learn

what other organizations are doing and where they're headed with cloud computing. If your company is considering the move from a traditional network infrastructure to a cutting-edge cloud solution, you need this strategic guide. Cloud Computing: A Practical Approach covers: Costs, benefits, security issues, regulatory concerns, and limitations Service providers, including Google, Microsoft, Amazon, Yahoo, IBM, EMC/VMware, Salesforce.com, and others Hardware, infrastructure, clients, platforms, applications, services, and storage Standards, including HTTP, HTML, DHTML, XMPP, SSL, and OpenID Web services, such as REST, SOAP, and JSON Platform as a Service (PaaS), Software as a Service (SaaS), and Software plus Services (S+S) Custom application development environments, frameworks, strategies, and solutions Local clouds, thin clients, and virtualization Migration, best practices, and emerging standards

Enterprise Cloud Computing South Asian Edition

The broad scope of Cloud Computing is creating a technology, business, sociolo- cal, and economic renaissance. It delivers the promise of making services available quickly with rather little effort. Cloud Computing allows almost anyone, anywhere, at anytime to interact with these service offerings. Cloud Computing creates a unique opportunity for its users that allows anyone with an idea to have a chance to deliver it to a mass market base. As Cloud Computing continues to evolve and penetrate different industries, it is inevitable that the scope and definition of Cloud Computing becomes very subjective, based on providers' and customers' persp- tive of applications. For instance, Information Technology (IT) professionals p- ceive a Cloud as an unlimited, on-demand, flexible computing fabric that is always available to support their needs. Cloud users experience Cloud services as virtual, off-premise applications provided by Cloud service providers. To an end user, a p- vider offering a set of services or applications in the Cloud can manage these off- ings remotely. Despite these discrepancies, there is a general consensus that Cloud Computing includes technology that uses the Internet and collaborated servers to integrate data, applications, and computing resources. With proper Cloud access, such technology allows consumers and businesses to access their personal files on any computer without having to install special tools. Cloud Computing facilitates efficient operations and management of comp- ing technologies by federating storage, memory, processing, and bandwidth.

Transforming Enterprise Cloud Services

The primary purpose of this book is to capture the state-of-the-art in Cloud Computing technologies and applications. The book will also aim to identify potential research directions and technologies that will facilitate creation a global market-place of cloud computing services supporting scientific, industrial, business, and consumer applications. We expect the book to serve as a reference for larger audience such as systems architects, practitioners, developers, new researchers and graduate level students. This area of research is relatively recent, and as such has no existing reference book that addresses it. This book will be a timely contribution to a field that is gaining considerable research interest, momentum, and is expected to be of increasing interest to commercial developers. The book is targeted for professional computer science developers and graduate students especially at Masters level. As Cloud Computing is recognized as one of the top five emerging technologies that will have a major impact on the quality of science and society over the next 20 years, its knowledge will help position our readers at the forefront of the field.

Cloud Computing

Cloud Computing is here to stay. As an economically viable way for businesses of all sizes to distribute computing, this technology shows tremendous promise. But the intense hype surrounding the Cloud is making it next to impossible for responsible IT managers and businessdecision-makers to get a clear understanding of what the Cloud really means, what it might do for them, when it is practical, and what their future with the Cloud looks like. The Cloud at Your Service helps cut through all this fog to help enterprises make these critical decisions based on facts and the authors' informed unbiased recommendations and predictions. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from

Manning. Also available is all code from the book.

The Cloud at Your Service

What would you do if your IT job was no longer performed in your country? Your survival does not lie in limiting global collaborative engineering. IT workers will survive and prosper because of their ability to innovate, to quickly learn and change directions, and to evolve from Information Technology into Distributed Knowledge Marketplace. You have no choice but to be pro-active, learn to stay current, even run ahead of the game. Integration-Ready Architecture and Design bridges the gap for a new generation of wired and wireless software technologies and teaches a set of skills that are demanded by fast moving software evolution. This up-to-date textbook integrates theory and practice, going from foundations and concepts to specific applications. Through deep insights into almost all areas of modern CIS and IT, Zhuk provides an entry into the new world of integrated knowledge and software engineering. Readers will learn the what s, why s, and how s on: J2EE, J2ME, .NET, JSAPI, JMS, JMF, SALT, VoiceXML, WAP, 802.11, CDNA, GPRS, CycL, XML, and multiple XML-based technologies including RDF, DAML, SOAP, UDDI, and WDSL. Students, architects, designers, coders, and even management benefit from innovative ideas and detailed examples for building multi-dimensional worlds of enterprise applications and creating distributed knowledge marketplace.

Integration-Ready Architecture and Design

Massive, disruptive change is coming to IT as software as a service (SaaS), SOA, mashups, Web 2.0, and cloud computing truly come of age. Now, one of the world's leading IT innovators explains what it all means—coherently, thoroughly, and authoritatively. Writing for IT executives, architects, and developers alike, world-renowned expert David S. Linthicum explains why the days of managing IT organizations as private fortresses will rapidly disappear as IT inevitably becomes a global community. He demonstrates how to run IT when critical elements of customer, product, and business data and processes extend far beyond the firewall-and how to use all that information to deliver real-time answers about everything from an individual customer's credit to the location of a specific cargo container. Cloud Computing and SOA Convergence in Your Enterprise offers a clear-eyed assessment of the challenges associated with this new world-and offers a step-by-step program for getting there with maximum return on investment and minimum risk. Using multiple examples, Linthicum Reviews the powerful cost, value, and risk-related drivers behind the move to cloud computing-and explains why the shift will accelerate Explains the technical underpinnings, supporting technologies, and best-practice methods you'll need to make the transition Helps you objectively assess the promise of cloud computing and SOA for your organization, quantify value, and make the business case Walks you through evaluating your existing IT infrastructure and finding your most cost-effective, safest path to the "cloud" Shows how to choose the right candidate data, services, and processes for your cloud computing initiatives Guides you through building disruptive infrastructure and next-generation process platforms Helps you bring effective, high-value governance to the clouds If you're ready to begin driving real competitive advantage from cloud computing, this book is the start-to-finish roadmap you need to make it happen.

Cloud Computing and SOA Convergence in Your Enterprise

Cloud Enterprise Architecture examines enterprise architecture (EA) in the context of the surging popularity of Cloud computing. It explains the different kinds of desired transformations the architectural blocks of EA undergo in light of this strategically significant convergence. Chapters cover each of the contributing architectures of EA—business, information, application, integration, security, and technology—illustrating the current and impending implications of the Cloud on each. Discussing the implications of the Cloud paradigm on EA, the book details the perceptible and positive changes that will affect EA design, governance, strategy, management, and sustenance. The author ties these topics together with chapters on Cloud integration and composition architecture. He also examines the Enterprise Cloud, Federated Clouds,

and the vision to establish the InterCloud. Laying out a comprehensive strategy for planning and executing Cloud-inspired transformations, the book: Explains how the Cloud changes and affects enterprise architecture design, governance, strategy, management, and sustenance Presents helpful information on next-generation Cloud computing Describes additional architectural types such as enterprise-scale integration, security, management, and governance architectures This book is an ideal resource for enterprise architects, Cloud evangelists and enthusiasts, and Cloud application and service architects. Cloud center administrators, Cloud business executives, managers, and analysts will also find the book helpful and inspirational while formulating appropriate mechanisms and schemes for sound modernization and migration of traditional applications to Cloud infrastructures and platforms.

Cloud Enterprise Architecture

Despite the buzz surrounding the cloud computing, only a small percentage of organizations have actually deployed this new style of IT—so far. If you're planning your long-term cloud strategy, this practical book provides insider knowledge and actionable real-world lessons regarding planning, design, operations, security, and application transformation. This book teaches business and technology managers how to transition their organization's traditional IT to cloud computing. Rather than yet another book trying to sell or convince readers on the benefits of clouds, this book provides guidance, lessons learned, and best practices on how to design, deploy, operate, and secure an enterprise cloud based on real-world experience. Author James Bond provides useful guidance and best-practice checklists based on his field experience with real customers and cloud providers. You'll view cloud services from the perspective of a consumer and as an owner/operator of an enterprise private or hybrid cloud, and learn valuable lessons from successful and lessthan-successful organization use-case scenarios. This is the information every CIO needs in order to make the business and technical decisions to finally execute on their journey to cloud computing. Get updated trends and definitions in cloud computing, deployment models, and for building or buying cloud services Discover challenges in cloud operations and management not foreseen by early adopters Use real-world lessons to plan and build an enterprise private or hybrid cloud Learn how to assess, port, and migrate legacy applications to the cloud Identify security threats and vulnerabilities unique to the cloud Employ a cloud management system for your enterprise (private or multi-provider hybrid) cloud ecosystem Understand the challenges for becoming an IT service broker leveraging the power of the cloud

The Enterprise Cloud

This book provides a technical description of cloud computing technologies, covering cloud infrastructure and platform services. It then addresses the basics of operating a Cloud computing data center, the services offered from Cloud providers, the carrier role in connecting users to data centers, and the process of interconnecting Cloud data centers to form a flexible processing unit. It also describes how cloud computing has made an impact in various industries and provides emerging technologies that are critical within each industry. Lastly, this book will address security requirements and provide the best practices in securing data.

Enterprise Cloud Computing for Non-Engineers

This invaluable guide addresses the Why, What, and How of enterprise cloud adoption, leveraging a clear framework and proven best practices from Microsoft's own experience. "Great book. What's particularly impressive is the outline of steps Microsoft itself is taking in its move to the cloud. Do as I do is always more powerful than do as I say." —Al Ries, Coauthor, War in the Boardroom "This book takes on enterprise cloud adoption to a level I've not seen before—made even more elegant with its structured framework and crisp approach." —Anthony D. Christie, CMO, Level 3 Communications, Former CTO/CIO, Global Crossing "A practical and timely guide that covers the entire journey to the cloud from an enterprise perspective, including business, technology, and organizational impact." —Bart Luijten, CIO Corporate Functions & Corporate Technology, Philips "The cloud powers business solutions for building tomorrow's enterprise and this book offers a simple, well-structured, and high-level process map for cloud adoption." —Kris

Gopalakrishnan, Executive Co-Chairman, Infosys Limited Cloud computing is full of tremendous opportunity, but is also riddled with hype and confusion. Business and technology leaders know the cloud is essential, but lack clarity and experience. To the Cloud cuts through the noise and addresses the Why, What, and How of enterprise cloud adoption. The book lays out a four-step framework leveraging the experience and best practices of Microsoft's own IT group. It provides end-to-end business and technology guidance, including how to analyze application portfolios to identify good cloud candidates, choose the right cloud models, consider architecture and security, and understand how shifting operations to the cloud affects budgeting and staffing. The book is applicable to all cloud platforms and providers, and debunks myths in its clear and concise style (e.g., real clouds are more than just web hosting, virtualization, or the Internet itself rebranded). It takes a balanced approach, addressing concerns and hybrid adoption scenarios alike. Leveraging the authors' proven expertise working for Microsoft's CIO on cloud migration and with cloud platform development teams, the book is supported by clear frameworks, graphics, tables, summaries, and checklists to provide a true practitioner's guide to the cloud. In this book, you will learn how to Explore cloud computing to understand its promise and challenges Envision how cloud computing can transform your organization Enable your organization with the necessary resources and skills Execute the design, development, and operation of cloud workloads To the Cloud is an essential guide for IT professionals seeking to lower total cost of ownership, improve the return on IT investment of existing services, or help the business bring new products to market more quickly.

To the Cloud: Cloud Powering an Enterprise

\"Follows structured approach explaining cloud techniques, models and platforms\"--

Cloud Computing

\"In this book, David Linthicum does that rarest of things: he manages to combine showing why SOA and Cloud Computing complement one another with a lucid game plan of how a business can take advantage of the synergies between them in concrete ways that will contribute to the bottom line.\" --Jeremy Geelan Conference Chair, Cloud Computing Conference and Expo series Sr. VP, SYS-CON Media and Events Massive, disruptive change is coming to IT as Software as a Service (SaaS), SOA, mashups, Web 2.0, and cloud computing truly come of age. Now, one of the world's leading IT innovators explains what it all means--coherently, thoroughly, and authoritatively. Writing for IT executives, architects, and developers alike, world-renowned expert David S. Linthicum explains why the days of managing IT organizations as private fortresses will rapidly disappear as IT inevitably becomes a global community. He demonstrates how to run IT when critical elements of customer, product, and business data and processes extend far beyond the firewall--and how to use all that information to deliver real-time answers about everything from an individual customer's credit to the location of a specific cargo container. Cloud Computing and SOA Convergence in Your Enterprise offers a clear-eyed assessment of the challenges associated with this new world--and offers a step-by-step program for getting there with maximum return on investment and minimum risk. Using multiple examples, Linthicum: Reviews the powerful cost, value, and risk-related drivers behind the move to cloud computing--and explains why the shift will accelerate Explains the technical underpinnings, supporting technologies, and best-practice methods you'll need to make the transition Helps you objectively assess the promise of SaaS, Web 2.0, and SOA for your organization, quantify value, and make the business case Walks you through evaluating your existing IT infrastructure and finding your most cost-effective, safest path to the \"cloud\" Shows how to choose the right candidate data, services, and processes for your cloud computing initiatives Guides you through building disruptive infrastructure and next-generation process platforms Helps you bring effective, high-value governance to the clouds If you're ready to begin driving real competitive advantage from cloud computing, this book is the start-to-finish roadmap you need to make it happen.

Cloud Computing and SOA Convergence in Your Enterprise (paperback)

Despite the buzz surrounding the cloud computing, only a small percentage of organizations have actually

deployed this new style of IT{u2014}so far. If you're planning your long-term cloud strategy, this practical book provides insider knowledge and actionable real-world lessons regarding planning, design, operations, security, and application transformation. This book teaches business and technology managers how to transition their organization's traditional IT to cloud computing. Rather than yet another book trying to sell or convince readers on the benefits of clouds, this book provides guidance, lessons learned, and best practices on how to design, deploy, operate, and secure an enterprise cloud based on real-world experience. Author James Bond provides useful guidance and best-practice checklists based on his field experience with real customers and cloud providers. You'll view cloud services from the perspective of a consumer and as an owner/operator of an enterprise private or hybrid cloud, and learn valuable lessons from successful and lessthan-successful organization use-case scenarios. This is the information every CIO needs in order to make the business and technical decisions to finally execute on their journey to cloud computing. Get updated trends and definitions in cloud computing, deployment models, and for building or buying cloud services Discover challenges in cloud operations and management not foreseen by early adopters Use real-world lessons to plan and build an enterprise private or hybrid cloud Learn how to assess, port, and migrate legacy applications to the cloud Identify security threats and vulnerabilities unique to the cloud Employ a cloud management system for your enterprise (private or multi-provider hybrid) cloud ecosystem Understand the challenges for becoming an IT service broker leveraging the power of the cloud.

Enterprise Cloud

This book presents a comprehensive and novel adaptive enterprise service systems approach to adapting, defining, operating, managing and supporting (ADOMS) the adaptive cloud enterprise architecture. The adaptive cloud enterprise architecture provides a platform for creating the service-centric agile enterprise. This book is intended for enterprise strategists, enterprise architects, domain architects, solution architects, researchers, and anyone who has an interest in the enterprise architecture and cloud computing disciplines. Contents:IntroductionCloud-Enabled Enterprise AdaptationThe Adaptive Enterprise Service System MetamodelThe Adaptive Enterprise Service System Lifecycle ManagementAdapting Cloud Enterprise Architecture CapabilityDefining Cloud Enterprise Architecture CapabilitySupporting Cloud Enterprise Architecture CapabilitySupporting Cloud Enterprise Architecture CapabilityCase Study Examples Readership: Researchers, academics, professionals and graduate students in software engineering, information sciences and networking. Keywords:Agility;Agile Enterprise Architecture;Cloud Computing;Design Thinking;Innovation

Adaptive Cloud Enterprise Architecture

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.

Briggs

Every day, companies struggle to scale critical applications. As traffic volume and data demands increase, these applications become more complicated and brittle, exposing risks and compromising availability. This practical guide shows IT, devops, and system reliability managers how to prevent an application from becoming slow, inconsistent, or downright unavailable as it grows. Scaling isn't just about handling more users; it's also about managing risk and ensuring availability. Author Lee Atchison provides basic techniques for building applications that can handle huge quantities of traffic, data, and demand without affecting the quality your customers expect. In five parts, this book explores: Availability: learn techniques for building

highly available applications, and for tracking and improving availability going forward Risk management: identify, mitigate, and manage risks in your application, test your recovery/disaster plans, and build out systems that contain fewer risks Services and microservices: understand the value of services for building complicated applications that need to operate at higher scale Scaling applications: assign services to specific teams, label the criticalness of each service, and devise failure scenarios and recovery plans Cloud services: understand the structure of cloud-based services, resource allocation, and service distribution

Architecting for Scale

Recent advances in internet architecture have led to the advent and subsequent explosion of cloud computing technologies, providing businesses with a powerful toolbox of collaborative digital resources. These technologies have fostered a more flexible, decentralized approach to IT infrastructure, enabling businesses to operate in a more agile fashion and on a globalized scale. Enterprise Management Strategies in the Era of Cloud Computing seeks to explore the possibilities of business in the cloud. Targeting an audience of research scholars, students, software developers, and business professionals, this premier reference source provides a cutting-edge look at the exciting and multifaceted relationships between cloud computing, software virtualization, collaborative technology, and business infrastructure in the 21st Century.

Enterprise Management Strategies in the Era of Cloud Computing

Cloud computing is the delivery of different services through the Internet, including data storage, servers, databases, networking, and software. Cloud-based storage makes it possible to save files to a remote database and retrieve them on demand.

CLOUD COMPUTING

\"True to form, Melvin Greer's futurist thinking provides new applicability to Software as a Service that identifies ways of reducing costs, creating greater efficiencies, and ultimately providing significant long-term value through business transformation. He continues to be on the cutting edge of merging business function evolution and technology innovation to increase customer satisfaction and return on investments.\" -Kevin Manuel-Scott, chairman and CEO, RONIN IT Services, LLC \"Melvin Greer provides an excellent guide to the Cloud computing IT model with a solid overview of concepts, business aspects, technical implications, benefits, challenges, and trends. Definitely a 'must read' for IT managers and enterprise architects considering adoption of this flexible, beneficial business model within their organization.\" -John Magnuson, senior staff engineer, Lockheed Martin \"This book offers the most comprehensive view of Cloud computing and SaaS on the market today. The author skillfully lays out a game plan for government and commercial entities alike looking to stay relevant in this burgeoning business paradigm.\" -Ken Brown, program account executive, IBM Federal Almost every business reaches a time when the fundamentals change. This time is referred to as a strategic inflection point. Adopting new technology or fighting the competition may not be enough when these critical moments arise. That's because inflection points build up force so quickly that organizations may have a hard time even putting a finger on what has changed. The way a firm responds could propel it to new heights or lead to its demise. Over the last few years, industry has begun developing a model of information technology known as Cloud computing, which includes Software as a Service. This new model has reached an inflection point and will give users the choice to purchase IT as a service, as a complement to, or as a replacement of the traditional IT software/hardware infrastructure purchase. It's time for businesses to transform how they approach advanced software and innovative business models so they can achieve real agility. If you are a decision maker involved with the deployment of information technology, then it's imperative that you understand Software as a Service Inflection Point.

Software as a Service Inflection Point

How Humans Learn to Think Mathematically describes the development of mathematical thinking from the

young child to the sophisticated adult. Professor David Tall reveals the reasons why mathematical concepts that make sense in one context may become problematic in another. For example, a child's experience of whole number arithmetic successively affects subsequent understanding of fractions, negative numbers, algebra, and the introduction of definitions and proof. Tall's explanations for these developments are accessible to a general audience while encouraging specialists to relate their areas of expertise to the full range of mathematical thinking. The book offers a comprehensive framework for understanding mathematical growth, from practical beginnings through theoretical developments, to the continuing evolution of mathematical thinking at the highest level.

How Humans Learn to Think Mathematically

The essential roadmaps for enterprise cloud adoption As cloud technologies continue to challenge the fundamental understanding of how businesses work, smart companies are moving quickly to adapt to a changing set of rules. Adopting the cloud requires a clear roadmap backed by use cases, grounded in practical real-world experience, to show the routes to successful adoption. The Cloud Adoption Playbook helps business and technology leaders in enterprise organizations sort through the options and make the best choices for accelerating cloud adoption and digital transformation. Written by a team of IBM technical executives with a wealth of real-world client experience, this book cuts through the hype, answers your questions, and helps you tailor your cloud adoption and digital transformation journey to the needs of your organization. This book will help you: Discover how the cloud can fulfill major business needs Adopt a standardized Cloud Adoption Framework and understand the key dimensions of cloud adoption and digital transformation Learn how cloud adoption impacts culture, architecture, security, and more Understand the roles of governance, methodology, and how the cloud impacts key players in your organization. Providing a collection of winning plays, championship advice, and real-world examples of successful adoption, this playbook is your ultimate resource for making the cloud work. There has never been a better time to adopt the cloud. Cloud solutions are more numerous and accessible than ever before, and evolving technology is making the cloud more reliable, more secure, and more necessary than ever before. Don't let your organization be left behind! The Cloud Adoption Playbook gives you the essential guidance you need to make the smart choices that reduce your organizational risk and accelerate your cloud adoption and digital transformation.

The Cloud Adoption Playbook

\"Provides strategic insights, describes the breakout business models, and offers the planning and implementation guidance business and technology leaders need to chart their course ahead.\" - cover.

Enterprise Cloud Computing

See how the principles of Service Science govern the dynamics driving the adoption of cloud computing in the industry. Cloud as Service shows you how the evolution of enterprise computing platforms to application-specific cloud platforms (ASCPs) have aligned to business needs. You'll also learn processes for developing and building ASCPs. You'll gain insight into how executives, managers, and technologists are utilizing cloud services, cloud service providers, equipment manufacturers, and software and application vendors participating in cloud supply chains. For business, the appeal of cloud computing must go beyond the notion of convenient, on-demand access of networked pooled access to computing resources. Industry leaders have learned to apply cloud computing to become more nimble, cost effective, and customer engaging as they strive for competitive advantage, regardless of size. These companies define and build cloud platforms customized for their needs rather than using someone else's. This book shows you how to use a holistic, end-to-end view of platform planning, platform development, supply chains and operations to collapse platform development times to a fraction of the original time. You'll see that strategies for selling to the cloud market are essentially incomplete; and that in order to be successful, businesses must become cloud service businesses themselves, incorporating cloud technologies in their engineering, IT, sales and marketing,

and delivery processes. What You'll Learn: Historical perspective to provide insight into the dynamics driving cloud evolution today State of the art in IT requirements and cloud solutions The value of User Experience (UX) driven design principles The crucial roles of Service Brokers and Service Assurance Managers The landscape of emerging cloud services and what they mean to your enterprise Service Portals and Enterprise Service Buses Who This Book Is For: CIOs, CTOs, data center architects, solution architects and application engineers Educational institutions building a systems integration curriculum Developers who want to understand how their work fits in the cloud ecosystem

Cloud as a Service

The on-demand availability of computer system resources without direct active management by the user is known as cloud computing. It is usually used to refer to the data centers, which are available over the Internet to many users. A few major types of clouds are enterprise clouds, public clouds and hybrid cloud. Enterprise clouds, also called private clouds, are usually limited to a single organization while public clouds are available to many organizations. A hybrid cloud is a cloud computing service, which is made up of a fusion of public, private and community cloud services. Cloud computing majorly relies on sharing of resources to achieve economies of scale and coherence. Cloud computing is an upcoming field of science that has undergone rapid development over the past few decades. Different approaches, concepts and technologies related to this field have been included in this book. It will serve as a reference to a broad spectrum of readers.

Cloud Computing: Concepts and Technology

Service computing is a cross-disciplinary field that covers science and technology, and represents a promising direction for distributed computing and software development methodologies. It aims to bridge the gap between business services and IT services by supporting the whole lifecycle of services innovation. Over the last ten years applications in industry and academic research have produced considerable progress and success Service Computing: Concept, Method and Technology presents the concept of service computing and a proposed reference architecture for service computing research before proceeding to introduce two underlying technologies: Web services and service-oriented architecture. It also presents the authors' latest research findings on hot topics such as service discovery, recommendation, composition, verification, service trust, dynamic configuration and big data service. Some new models and methods are proposed including three service discovery methods based on semantics and skyline technologies, two service recommendation methods using graph mining and QoS prediction, two service composition methods with graph planning and one service verification method using ? calculus and so on. Moreover, this book introduces JTang, an underlying platform supporting service computing, which is a product of the authors' last ten years of research and development. Systematically reviews all the research on service computing Introduces state-ofart research works on service computing and provides a road map for future directions Bridges the gap between service computing theory and practice Provides guidance for both industry and academia

Service Computing: Concept, Method and Technology

The Complete Guide to Optimizing Systems Performance Written by the winner of the 2013 LISA Award for Outstanding Achievement in System Administration Large-scale enterprise, cloud, and virtualized computing systems have introduced serious performance challenges. Now, internationally renowned performance expert Brendan Gregg has brought together proven methodologies, tools, and metrics for analyzing and tuning even the most complex environments. Systems Performance: Enterprise and the Cloud focuses on Linux® and Unix® performance, while illuminating performance issues that are relevant to all operating systems. You'll gain deep insight into how systems work and perform, and learn methodologies for analyzing and improving system and application performance. Gregg presents examples from bare-metal systems and virtualized cloud tenants running Linux-based Ubuntu®, Fedora®, CentOS, and the illumos-based Joyent® SmartOSTM and OmniTI OmniOS®. He systematically covers modern systems performance, including the "traditional"

analysis of CPUs, memory, disks, and networks, and new areas including cloud computing and dynamic tracing. This book also helps you identify and fix the "unknown unknowns" of complex performance: bottlenecks that emerge from elements and interactions you were not aware of. The text concludes with a detailed case study, showing how a real cloud customer issue was analyzed from start to finish. Coverage includes • Modern performance analysis and tuning: terminology, concepts, models, methods, and techniques • Dynamic tracing techniques and tools, including examples of DTrace, SystemTap, and perf • Kernel internals: uncovering what the OS is doing • Using system observability tools, interfaces, and frameworks • Understanding and monitoring application performance • Optimizing CPUs: processors, cores, hardware threads, caches, interconnects, and kernel scheduling • Memory optimization: virtual memory, paging, swapping, memory architectures, busses, address spaces, and allocators • File system I/O, including caching • Storage devices/controllers, disk I/O workloads, RAID, and kernel I/O • Network-related performance issues: protocols, sockets, interfaces, and physical connections • Performance implications of OS and hardwarebased virtualization, and new issues encountered with cloud computing • Benchmarking: getting accurate results and avoiding common mistakes This guide is indispensable for anyone who operates enterprise or cloud environments: system, network, database, and web admins; developers; and other professionals. For students and others new to optimization, it also provides exercises reflecting Gregg's extensive instructional experience.

Systems Performance

Well-known security experts decipher the most challenging aspect of cloud computing-security Cloud computing allows for both large and small organizations to have the opportunity to use Internet-based services so that they can reduce start-up costs, lower capital expenditures, use services on a pay-as-you-use basis, access applications only as needed, and quickly reduce or increase capacities. However, these benefits are accompanied by a myriad of security issues, and this valuable book tackles the most common security challenges that cloud computing faces. The authors offer you years of unparalleled expertise and knowledge as they discuss the extremely challenging topics of data ownership, privacy protections, data mobility, quality of service and service levels, bandwidth costs, data protection, and support. As the most current and complete guide to helping you find your way through a maze of security minefields, this book is mandatory reading if you are involved in any aspect of cloud computing. Coverage Includes: Cloud Computing Fundamentals Cloud Computing Risks Issues Cloud Computing Security Challenges Cloud Computing Security Architecture Cloud Computing Life Cycle Issues Useful Next Steps and Approaches

Cloud Security

Poorly performing enterprise applications are the weakest links in a corporation's management chain, causing delays and disruptions of critical business functions. This groundbreaking book frames enterprise application performance engineering not as an art but as applied science built on model-based methodological foundation. The book introduces queuing models of enterprise application that visualize, demystify, explain, and solve system performance issues. Analysis of these models will help to discover and clarify unapparent connections and correlations among workloads, hardware architecture, and software parameters.

Solving Enterprise Applications Performance Puzzles

\"This book presents a collection of diverse perspectives on cloud computing and its vital role in all components of organizations, improving the understanding of cloud computing and tackling related concerns such as change management, security, processing approaches, and much more\"--Provided by publisher.

Cloud Computing Service and Deployment Models: Layers and Management

Cloud computing has become a significant technology trend. Experts believe cloud computing is currently https://competition-finder.com googlebook reshaping information technology and the IT marketplace. The advantages of using cloud computing include cost savings, speed to market, access to greater computing resources, high availability, and scalability. Handbook of Cloud Computing includes contributions from world experts in the field of cloud computing from academia, research laboratories and private industry. This book presents the systems, tools, and services of the leading providers of cloud computing; including Google, Yahoo, Amazon, IBM, and Microsoft. The basic concepts of cloud computing and cloud computing applications are also introduced. Current and future technologies applied in cloud computing are also discussed. Case studies, examples, and exercises are provided throughout. Handbook of Cloud Computing is intended for advanced-level students and researchers in computer science and electrical engineering as a reference book. This handbook is also beneficial to computer and system infrastructure designers, developers, business managers, entrepreneurs and investors within the cloud computing related industry.

Handbook of Cloud Computing

Practical business cases and techniques to help you understand when cloud investments make sense and when they don't. With decision models that are anchored with practical experiences and lessons to guide your decision making.

Is Your Company Ready for Cloud?

Your organization can save and thrive in the cloud with this first non-technical guide to cloud computing for business leaders In less than a decade Google, Amazon, and Salesforce.com went from unknown ideas to powerhouse fixtures in the economic landscape; in even less time offerings such as Linkedin, Youtube, Facebook, Twitter and many others also carved out important roles; in less than five years Apple's iTunes became the largest music retailer in North America. They all share one key strategic decision – each of these organizations chose to harness the power of cloud computing to power their drives to dominance. With roots in supercomputing and many other technical disciplines, cloud computing is ushering in an entirely new economic reality - technology-enabled enterprises built on low cost, flexible, and limitless technical infrastructures. The Executive's Guide to Cloud Computing reveals how you can apply the power of cloud computing throughout your enterprise, giving members of the C-suite a detailed look at: Why cloud computing must be a top priority on your company's IT roadmaps How the drive for scale, lower costs and greater agility is making cloud computing a fiscal and technological imperative The relationship between cloud computing and other relevant IT initiatives The strategic implications of cloud computing for the enterprise Where to begin and how to get started integrating cloud computing into your existing operations Now you can harness cloud computing's potential for your organization. Executive's Guide to Cloud Computing shows you how.

Executive's Guide to Cloud Computing

Written for the professional IT engineer, Creating the Infrastructure for Enterprise Cloud Computing is the essential practical guide to the theory, practice, and implementation of virtual service grids. The book is organized into separate sections that focus on: virtualization and cloud technology, general architecture, solution architecture, and reference implementations. This structure allows the reader to quickly access the information needed to plan and implement a cloud computing project.

Creating the Infrastructure for Cloud Computing

Web services are leading to the use of more packaged software either as an internal service or an external service available over the Internet. These services, which will be connected together to create the information technology systems of the future, will require less custom software in our organizations and more creativity in the connections between the services. This book begins with a high-level example of how an average person in an organization might interact with a service-oriented architecture. As the book progresses, more

technical detail is added in a \"peeling of the onion\" approach. The leadership opportunities within these developing service-oriented architectures are also explained. At the end of the book there is a compendium or \"pocket library\" for software technology related to service-oriented architectures. \cdot Only web services book to cover both data management and software engineering perspectives, excellent resource for ALL members of IT teams \cdot Jargon free, highly illustrated, with introduction that anyone can read that then leads into increasing technical detail \cdot Provides a set of leadership principles and suggested application for using this technology.

Web Services, Service-Oriented Architectures, and Cloud Computing

Deep Learning and Parallel Computing Environment for Bioengineering Systems delivers a significant forum for the technical advancement of deep learning in parallel computing environment across bio-engineering diversified domains and its applications. Pursuing an interdisciplinary approach, it focuses on methods used to identify and acquire valid, potentially useful knowledge sources. Managing the gathered knowledge and applying it to multiple domains including health care, social networks, mining, recommendation systems, image processing, pattern recognition and predictions using deep learning paradigms is the major strength of this book. This book integrates the core ideas of deep learning and its applications in bio engineering application domains, to be accessible to all scholars and academicians. The proposed techniques and concepts in this book can be extended in future to accommodate changing business organizations' needs as well as practitioners' innovative ideas. Presents novel, in-depth research contributions from a methodological/application perspective in understanding the fusion of deep machine learning paradigms and their capabilities in solving a diverse range of problems Illustrates the state-of-the-art and recent developments in the new theories and applications of deep learning approaches applied to parallel computing environment in bioengineering systems Provides concepts and technologies that are successfully used in the implementation of today's intelligent data-centric critical systems and multi-media Cloud-Big data

Deep Learning and Parallel Computing Environment for Bioengineering Systems

Unleash the power of serverless integration with Azure About This Book Build and support highly available and scalable API Apps by learning powerful Azure-based cloud integration Deploy and deliver applications that integrate seamlessly in the cloud and quickly adapt as per your integration needs Deploy hybrid applications that work and integrate on the cloud (using Logic Apps and BizTalk Server) Who This Book Is For This book is for Microsoft Enterprise developers, DevOps, and IT professionals who would like to use Azure App Service and Microsoft Cloud Integration technologies to create cloud-based web and mobile apps. What You Will Learn Explore new models of robust cloud integration in Microsoft Azure Create your own connector and learn how to publish and manage it Build reliable, scalable, and secure business workflows using Azure Logic Apps Simplify SaaS connectivity with Azure using Logic Apps Connect your on-premises system to Azure securely Get to know more about Logic Apps and how to connect to on-premises "line-ofbusiness" applications using Microsoft BizTalk Server In Detail Microsoft is focusing heavily on Enterprise connectivity so that developers can build scalable web and mobile apps and services in the cloud. In short, Enterprise connectivity from anywhere and to any device. These integration services are being offered through powerful Azure-based services. This book will teach you how to design and implement cloud integration using Microsoft Azure. It starts by showing you how to build, deploy, and secure the API app. Next, it introduces you to Logic Apps and helps you quickly start building your integration applications. We'll then go through the different connectors available for Logic Apps to build your automated business process workflow. Further on, you will see how to create a complex workflow in Logic Apps using Azure Function. You will then add a SaaS application to your existing cloud applications and create Queues and Topics in Service Bus on Azure using Azure Portal. Towards the end, we'll explore event hubs and IoT hubs, and you'll get to know more about how to tool and monitor the business workflow in Logic Apps. Using this book, you will be able to support your apps that connect to data anywhere—be it in the cloud or on-premises. Style and approach This practical hands-on tutorial shows you the full capability of App Service and other Azure-based integration services to build scalable and highly available web and mobile apps. It helps you

successfully build and support your applications in the cloud or on-premises successfully. We'll debunk the popular myth that switching to cloud is risky—it's not!

Robust Cloud Integration with Azure

organic chemistry principles and mechanisms joel karty mot test manual 2012 a basic guide to contemporaryislamic banking and finance audi a3 8p haynes manual amayer financer un projet avec kickstarter etude des facteurs dinfluence french edition killing pablo the true story behind the hit series narcos kawasaki er650 er6n 2006 2008 factory service repair manual simplicity p1728e manual free bosch automotive handbook 8th edition fiat ducato owners manual