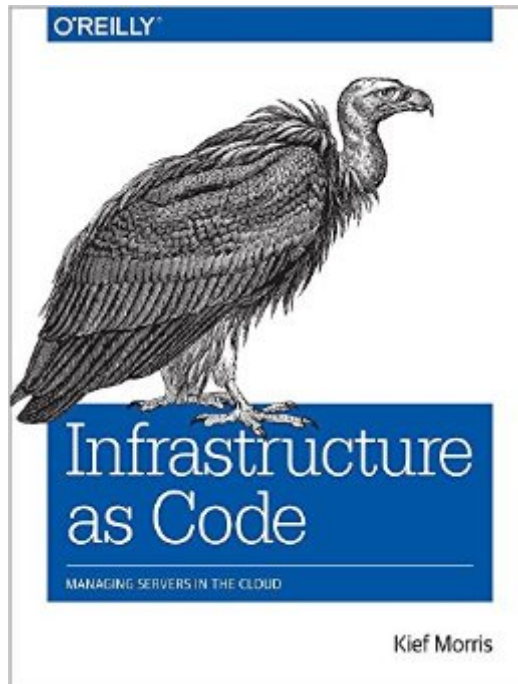# Infrastructure As Code: Managing Servers In The Cloud

Synopsis

Virtualization, cloud, containers, server automation, and software-defined networking are meant to simplify IT operations. But many organizations adopting these technologies have found that it only leads to a faster-growing sprawl of unmanageable systems. This is where infrastructure as code can help. With this practical guide, author Kief Morris of ThoughtWorks shows you how to effectively use principles, practices, and patterns pioneered through the DevOps movement to manage cloud age infrastructure.Ideal for system administrators, infrastructure engineers, team leads, and architects, this book demonstrates various tools, techniques, and patterns you can use to implement infrastructure as code. In three parts, youâ ™ll learn about the platforms and tooling involved in creating and configuring infrastructure elements, patterns for using these tools, and practices for making infrastructure as code work in your environment.Examine the pitfalls that organizations fall into when adopting the new generation of infrastructure technologiesUnderstand the capabilities and service models of dynamic infrastructure platformsLearn about tools that provide, provision, and configure core infrastructure resourcesExplore services and tools for managing a dynamic infrastructureLearn specific patterns and practices for provisioning servers, building server templates, and updating running servers

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Customer Reviews

Infrastructure as Code shows modern techniques to use the cloud. The beginning chapters detailed

the differences between the "Iron Age" of infrastructure and newer cloud based methods. Scripts are shown often to show how you would actually setup some cloud based instances. The author has a preference for Ruby and AWS.The middle portions of the book look at design patterns related to the cloud. Often "anti-patterns" are explored as well to show what not to do. Templating servers and configuration management is detailed.Part III of the book was basically a summary of DevOps. I found the information to be too general here, and sometimes not that relevant to Infrastructure. To give an example, the author discusses Code Reviews where he says: "All too often, code reviewing becomes a wasteful activity that doesn't lead to improvements actually being made to code. Pair programming is more rigorous, with input from two people leading to better design and improvements made in real time."The author often states opinions like this, but does not back them up by anything but his opinion. There was no evidence provided to show that code reviews are wasteful, while pair programming boosts productivity. Maybe this has been the case for the author, but I would have liked to seen more evidence for a lot of his claims. A lot of the asides in the book were taken from the author's personal experiences and used to prove something.I found the stronger parts of the book where the author shows configurations and details. Parts in which the author relied on personal experiences and generalizations were not as good. Overall though, this was an informative book that is helping define the new rules for cloud based architectures.

Many organizations have entered the world of cloud services, only to find it is not the panacea that they were lead to believe it would be.For example, while itâ ™s relatively easy to spin up new servers in AWS (Web Services), managing those servers once they are operational is not such an easy endeavor.In Infrastructure as Code: Managing Servers in the Cloud (O'Reilly Media ISBN-10: 1491924357), author Kief Morris has written an extremely useful book detailing how to effectively manage and gain control over your cloud infrastructure.As Morris writes, the ease of which cloud services can be deployed (far too often with lack of design or strategy), leads to the predicament where the mass amount of cloud vendors are simply unmanageable.As to infrastructure as code (IaC); it is the process of managing and provisioning servers and their configuration via definition files, rather than physical hardware configuration or the use of configuration management tools. The rise of IaaS has led to the widespread use of IaC.Morris notes that IaC is also an approach to infrastructure automation based on practices from software development. It emphasizes consistent, repeatable routines for provisioning and changing system and their configurations. Changes are made to definitions and then rolled out to systems through unattended processes.This is a highly technical reference, and in the books 15 chapter Morris details the use of innumerable tools and

techniques.The only lacking in the book is the scant coverage around security, which only is 9 pages in chapter 14.Aside from that, Infrastructure as Code: Managing Servers in the Cloud is an extraordinary good reference to help any cloud services manager start to gain control over their cloud infrastructure.

Good, light overview of modern automation and configuration management. In my estimation, too wordy for an overview and not specific or developed enough for learning relevant techniques though.

Excellent coverage of dynamic infrastructure management methodologies. I'm using it as one of the textbooks in my graduate-level DevOps course this fall.

Infrastructure as Code: Managing Servers in the Cloud iSpeak Cloud: Crossing the Cloud Chasm: Create a Cohesive Cloud Strategy Global Supply Chains: Evaluating Regions on an EPIC Framework - Economy, Politics, Infrastructure, and Competence: "EPIC" Structure - Economy, Politics, Infrastructure, and Competence Lord of the Infrastructure: A Roadmap for IT Infrastructure Managers Adobe Dreamweaver Creative Cloud: Comprehensive (Stay Current with Adobe Creative Cloud) Adobe Photoshop Creative Cloud Revealed (Stay Current with Adobe Creative Cloud) 2012 International Plumbing Code (Includes International Private Sewage Disposal Code) (International Code Council Series) Office 365: Migrating and Managing Your Business in the Cloud Bulletproof SSL and TLS: Understanding and Deploying SSL/TLS and PKI to Secure Servers and Web Applications Dovecot: POP3/IMAP servers for enterprises and ISPs COM+ Programming with Visual Basic: Developing COM+ Servers with COM, COM+, and .NET COM Beyond Microsoft: Designing and Implementing COM Servers on Compaq Platforms (HP Technologies) Performance Tuning for Linux(R) Servers Fedora Linux Servers with Systemd Fedora Linux Servers with systemd: second edition Performance Tuning for Linux Servers Fedora 18 Linux: Networking and Servers Mastering Linux - Servers Sap R/3 on DB2 for Os/390: Implementing With Aix or Windows Nt Applications Servers Alternative DNS Servers: Choice and Deployment, and Optional SQL/LDAP Back-Ends