

Learning Puppet 4 A Guide To Configuration Management And Automation Pdf Pdf

Learning Puppet 4 A Guide To Configuration Management And Automation Pdf Pdf - Unveiling the Magic of Words: A Overview of "**learning puppet 4 a guide to configuration management and automation pdf pdf**"

In a global defined by information and interconnectivity, the enchanting power of words has acquired unparalleled significance. Their capability to kindle emotions, provoke contemplation, and ignite transformative change is truly awe-inspiring. Enter the realm of "**learning puppet 4 a guide to configuration management and automation pdf pdf**," a mesmerizing literary masterpiece penned by way of a distinguished author, guiding readers on a profound journey to unravel the secrets and potential hidden within every word. In this critique, we shall delve to the book is central themes, examine its distinctive writing style, and assess its profound impact on the souls of its readers. Recognizing the mannerism ways to get this ebook **learning puppet 4 a guide to configuration management and automation pdf pdf** is additionally useful. You have remained in right site to begin getting this info. acquire the learning puppet 4 a guide to configuration management and automation pdf pdf associate that we find the money for here and check out the link.

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Learning Puppet 4 Jo Rhett 2016-03-24 If you're a system administrator, developer, or site reliability engineer responsible for handling hundreds or even thousands of nodes in your network, the Puppet configuration management tool will make your job a whole lot easier. This practical guide shows you what Puppet does, how it works, and how it can provide significant value to your organization. Through hands-on tutorials, DevOps engineer Jo Rhett demonstrates how Puppet manages complex and distributed components to ensure service availability. You'll learn how to secure configuration consistency across servers, clients, your router, and even that computer in your pocket by setting up your own testing environment. Learn exactly what Puppet is, why it was created, and what problems it solves Tailor Puppet to your infrastructure with a design that meets your specific needs Write declarative Puppet policies to produce consistency in your systems Build, test, and publish your own Puppet modules Manage network devices such as routers and switches with puppet device and integrated Puppet agents Scale Puppet servers for high availability and performance Explore web dashboards and orchestration tools that supplement and complement Puppet

Ansible Quick Start Guide Mohamed Alibi 2018-09-28 Configure Ansible and start coding YAML playbooks using the appropriate modules Key Features>Create and use Ansible Playbook to script and organise management tasksBenefit from the Ansible community roles and modules to resolve complex and niche tasksWrite configuration management code to automate infrastructureBook Description Configuration Management (CM) tools help administrators reduce their workload. Ansible is one of the best Configuration Management tools, and can act as an orchestrator for managing other CMs. This book is the easiest way to learn how to use Ansible as an orchestrator and a Configuration Management tool. With this book, you will learn how to control and monitor computer and network infrastructures of any size,physical or virtual. You will begin by learning about the Ansible client-server architecture. To get started, you will set up and configure an Ansible server. You will then go through the major features of Ansible: Playbook and Inventory. Then, we will look at Ansible systems and network modules. You will then use Ansible to enable infrastructure automated configuration management, followed by best practices for using Ansible roles and community modules. Finally, you will explore Ansible features such as Ansible Vault, Ansible Containers, and Ansible plugins. What you will learnImplement Playbook YAML scripts and its capacities to simplify day-to-day tasksSetup Static and Dynamic InventoryUse Ansible predefined modules for Linux, Windows, networking, and virtualisation administrationOrganize and configure the host filesystem using storage and files modulesImplement Ansible to enable infrastructure automated configuration managementSimplify infrastructure administrationSearch and install new roles and enable them within AnsibleSecure your data using Ansible VaultWho this book is for This book is targeted at System Administrators and Network Administrators who want to use Ansible to automate an infrastructure. No knowledge of Ansible is required.

Puppet 4 Essentials Felix Frank 2015-12-11 Acquire skills to manage your IT infrastructure effectively with Puppet About This Book Breeze through Puppet 4's key features and performance improvements to bring real advantage to your IT infrastructure Discover Puppet best practices to help you avoid common mistakes and pitfalls Blitz through easy-to-follow examples to get to grips with Puppet and succeed with everyday IT automation Who This Book Is For If you're an experienced IT professional and a new Puppet user, this book will provide you with all you need to know to go from installation to advanced automation in no time at all. Get a rapid introduction to the essential topics and then tackle Puppet for advanced automation. What You Will Learn Write and employ individual Puppet manifests Understand how Puppet implements system abstraction Deploy the Puppet master and agents Leverage and extend Factor to summarize your systems Create modular and reusable Puppet code Extend your code base with publicly available Puppet modules Use the modern features of Puppet 4 Separate logic from data using Hiera In Detail Puppet is a configuration management tool that allows you to automate all your IT configurations, giving you control over what you do to each Puppet Agent in a network, and when and how you do it. In this age of digital delivery and ubiquitous Internet presence, it's becoming increasingly important to implement scalable and portable solutions, not only in terms of software, but also the systems that run it. The free Ruby-based tool Puppet has established itself as the most successful solution to manage any IT infrastructure. Ranging from local development environments through complex data center setups to scalable cloud implementations, Puppet allows you to handle them all with a unified approach. Puppet 4 Essentials, Second Edition gets you started rapidly and intuitively as you'll put Puppet's tools to work right away. It will also highlight the changes associated with performance improvements as well as the new language features in Puppet 4. We'll start with a quick introduction to Puppet to get you managing your IT systems quickly. You will then learn about the Puppet Agent that comes with an all-in-one (AIO) package and can run on multiple systems. Next, we'll show you the Puppet Server for high-performance communication and passenger packages. As you progress through the book, the innovative structure and approach of Puppet will be explained with powerful use cases. The difficulties that are inherent to a complex and powerful tool will no longer be a problem for you as you discover Puppet's fascinating intricacies. By the end of the book, you will not only know how to use Puppet, but also its companion tools Factor and Hiera, and will be able to leverage the flexibility and expressive power implemented by their tool chain. Style and approach This quick learning guide for Puppet follows a practical approach, starting with some basic commands that you can use from the shell right away. It comprises a series of examples that will get you familiar with the most important aspects of Puppet in a flash.

Mastering Puppet Thomas Uphill 2016-02-25 Master Puppet for configuration management of your systems in an enterprise deployment About This Book This book is an advanced guide to using and deploying Puppet 4 in your organization with a special focus on issues faced in larger enterprise deployments From an experienced author, learn to deal with scaling, performance, and multiple developers with the help of real-world examples This is the most up-to-date guide on Puppet, and covers the advanced concepts of Puppet 4 Who This Book Is For This book is for those who have intermediate knowledge of Puppet and are looking to deploy it in their environment. Some idea how to write simple modules for configuration management with Puppet is a prerequisite for this book. What You Will Learn Scale out your Puppet infrastructure using proxying techniques Automate your code promotion workflow using Git and r10k Solve real-world problems using public modules from the Puppet Forge Use Hiera to separate the data of your configuration from the code of your configuration Write your own custom facts in Ruby Extend Puppet with your own custom facts, modules, and types Use exported resources to orchestrate change between machines Debug a puppetserver using Java techniques In Detail Puppet is a configuration management system and a language. It was written for and by system administrators to manage large numbers of systems efficiently and prevent configuration drifts. Mastering Puppet deals with the issues faced when scaling out Puppet to handle large numbers of nodes. It will show you how to fit Puppet into your enterprise and allow many developers to work on your Puppet code simultaneously. In addition, you will learn to write custom facts and roll your own modules to solve problems. Next, popular options for performing reporting and orchestration tasks will be introduced in this book. Moving over to troubleshooting techniques, which will be very useful. The concepts presented are useful to any size organization. By the end of the book, you will know how to deal with problems of scale and exceptions in your code, automate workflows, and support multiple developers working simultaneously. Style and approach This book is a step-wise guide packed with examples to help you configure complex systems in Puppet.

Extending Puppet Alessandro Franceschi 2016-06-27 Start pulling the strings of your infrastructure with Puppet - learn how to configure, customize, and manage your systems more intelligently About This Book Explore the wider Puppet ecosystem of useful tools Design and manage your Puppet architecture for optimum performance Write more efficient code that keeps your infrastructure more robust Who This Book Is For If you are a Puppet user, this book will help you on different levels. If you a beginner, we summarize the key Puppet components and give you the elements to have a broader vision. For more experienced users, you will be surprised by with topics on designing, implementing, adapting, and deploying Puppet architectures. If you are expert, you will find topics and information that is rarely exposed in other books, giving you an insight into Puppet's future and its usage on alternative devices. What You Will Learn Learn the principles of Puppet language and ecosystem Extract the features of Hiera and PuppetDB's power usage Explore the different approaches to Puppet architecture design Use Puppet to manage network, cloud, and virtualization devices Manage and test the Puppet code workflow Tweak, hack, and adapt the Puppet extension points Get a run through of the strategies and patterns to introduce Puppet automation Master the art of writing reusable modules In Detail Puppet has changed the way we manage our systems, but Puppet itself is changing and evolving, and so are the ways we are using it. To tackle our IT infrastructure challenges and avoid common errors when designing our architectures, an up-to-date, practical, and focused view of the current and future Puppet evolution is what we need. With Puppet, you define the state of your IT infrastructure, and it automatically enforces the desired state. This book will be your guide to designing and deploying your Puppet architecture. It will help you utilize Puppet to manage your IT infrastructure. Get to grips with Hiera and learn how to install and configure it, before learning best practices for writing reusable and maintainable code. You will also be able to explore the latest features of Puppet 4, before executing, testing, and deploying Puppet across your systems. As you progress, Extending Puppet takes you through higher abstraction modules, along with tips for effective code workflow management. Finally, you will learn how to develop plugins for Puppet - as well as some useful techniques that can help you to avoid common errors and overcome everyday challenges. Style and approach This is a collection of specific information about multiple topics related to Puppet and its ecosystem. Starting from a review of the very basics to more advanced topics, mixing practical advice with important theory and broader perspective, along with implementation details.

Kafka: The Definitive Guide Neha Narkhede 2017-08-31 Every enterprise application creates data, whether it's log messages, metrics, user activity, outgoing messages, or something else. And how to move all of this data becomes nearly as important as the data itself. If you're an application architect, developer, or production engineer new to Apache Kafka, this practical guide shows you how to use this open source streaming platform to handle real-time data feeds. Engineers from Confluent and LinkedIn who are responsible for developing Kafka explain how to deploy production Kafka clusters, write reliable event-driven microservices, and build scalable stream-processing applications with this platform. Through detailed examples, you'll learn Kafka's design principles, reliability guarantees, key APIs, and architecture details, including the replication protocol, the controller, and the storage layer. Understand publish-subscribe messaging and how it fits in the big data ecosystem. Explore Kafka producers and consumers for writing and reading messages Understand Kafka patterns and use-case requirements to ensure reliable data delivery Get best practices for building data pipelines and applications with Kafka Manage Kafka in production, and learn to perform monitoring, tuning, and maintenance tasks Learn the most critical metrics among Kafka's operational measurements Explore how Kafka's stream delivery capabilities make it a perfect source for stream processing systems **Puppet Best Practices** Chris Barbour 2018-08-24 If you maintain or plan to build Puppet infrastructure, this practical guide will take you a

critical step further with best practices for managing the task successfully. Authors Chris Barbour and Jo Rhett present best-in-class design patterns for deploying Puppet environments and discuss the impact of each. The conceptual designs and implementation patterns in this book will help you create solutions that are easy to extend, maintain, and support. Essential for companies upgrading their Puppet deployments, this book teaches you powerful new features and implementation models that weren't available in the older versions. DevOps engineers will learn how best to deploy Puppet with long-term maintenance and future growth in mind. Explore Puppet's design philosophy and data structures Get best practices for using Puppet's declarative language Examine Puppet resources in depth—the building blocks of state management Learn to model and describe business and site-specific logic in Puppet See best-in-class models for multitiered data management with Hiera Explore available options and community experience for node classification Utilize r10k to simplify and accelerate Puppet change management Review the cost benefits of creating your own extensions to Puppet Get detailed advice for extending Puppet in a maintainable manner

Puppet 4.10 Beginner's Guide John Arundel 2017-05-31 Puppet is great for developers, system administrators, IT professionals, and anyone laying the foundation for DevOps practices - this comprehensive guide will get you up to speed, all the way from installation to automation to the latest features of Puppet 4.10. About This Book Develop skills to run Puppet 4.10 on single or multiple servers without hiccups Use Puppet to spin up and manage cloud resources such as Amazon EC2 instances Take full advantage of the powerful new features of Puppet 4.10, including loops, data types, structured facts, R10K module management, control repos, and EPP templates Who This Book Is For Puppet Beginner's Guide, Second Edition is designed for those who are new to Puppet, including system administrators and developers who are looking to manage computer server systems for configuration management. No prior programming or system administration experience is assumed. What You Will Learn Covers the latest Puppet 4.10 release Install and set up Puppet and discover the latest and most advanced features Configure, build, and run containers in production using Puppet's industry-leading Docker support Deploy configuration files and templates at super-fast speeds and manage user accounts and access control Automate your IT infrastructure Use the latest features in Puppet 4 onward and its official modules Manage clouds, containers, and orchestration Get to know the best practices to make Puppet more reliable and increase its performance In Detail Puppet 4.10 Beginner's Guide, Second Edition, gets you up and running with the very latest features of Puppet 4.10, including Docker containers, Hiera data, and Amazon AWS cloud orchestration. Go from beginner to confident Puppet user with a series of clear, practical examples to help you manage every aspect of your server setup. Whether you're a developer, a system administrator, or you are simply curious about Puppet, you'll learn Puppet skills that you can put into practice right away. With practical steps giving you the key concepts you need, this book teaches you how to install packages and config files, create users, set up scheduled jobs, provision cloud instances, build containers, and so much more. Every example in this book deals with something real and practical that you're likely to need in your work, and you'll see the complete Puppet code that makes it happen, along with step-by-step instructions for what to type and what output you'll see. All the examples are available in a GitHub repo for you to download and adapt for your own server setup. Style and approach This tutorial is packed with quick step-by-step instructions that are immediately applicable for beginners. This is an easy-to-read guide, to learn Puppet from scratch, that explains simply and clearly all you need to know to use this essential IT power tool, while applying these solutions to real-world scenarios.

Pulling Strings with Puppet James Turnbull 2008-09-02 Competent system administrators know their success hinges upon being able to perform often tedious tasks with rigor and punctuality. Such metrics are often achieved only by instituting a considerable degree of automation, something that has become even more crucial as IT environments continue to scale both in terms of size and complexity. One of the most powerful system administration tools to be released is Puppet, a solution capable of automating nearly every aspect of a system administrator's job, from user management, to software installation, to even configuring server services such as FTP and LDAP. Pulling Strings with Puppet: Configuration Management Made Easy is the first book to introduce the powerful Puppet system administration tool. Author James Turnbull will guide you through Puppet's key features, showing you how to install and configure the software, create automated Puppet tasks, known as recipes, and even create reporting solutions and extend Puppet further to your own needs. A bonus chapter is included covering the Factor library, which makes it a breeze to automate the retrieval of server configuration details such as IP and MAC addresses.

Learning Puppet 4 Jo Rhett 2016-03-24 If you're a system administrator, developer, or site reliability engineer responsible for handling hundreds or even thousands of nodes in your network, the Puppet configuration management tool will make your job a whole lot easier. This practical guide shows you what Puppet does, how it works, and how it can provide significant value to your organization. Through hands-on tutorials, DevOps engineer Jo Rhett demonstrates how Puppet manages complex and distributed components to ensure service availability. You'll learn how to secure configuration consistency across servers, clients, your router, and even that computer in your pocket by setting up your own testing environment. Learn exactly what Puppet is, why it was created, and what problems it solves Tailor Puppet to your infrastructure with a design that meets your specific needs Write declarative Puppet policies to produce consistency in your systems Build, test, and publish your own Puppet modules Manage network devices such as routers and switches with puppet device and integrated Puppet agents Scale Puppet servers for high availability and performance Explore web dashboards and orchestration tools that supplement and complement Puppet

Learning Puppet Security Jason Slagle 2015-03-27 If you are a security professional whose workload is increasing, or a Puppet professional looking to increase your knowledge of security, or even an experienced systems administrator, then this book is for you. This book will take you to the next level of security automation using Puppet. The book requires no prior knowledge of Puppet to get started. *Puppet Three Beginner's Guide* John Arundel 2013 Presented in an easy-to-follow, step-by-step tutorial format, Puppet 3.0 Beginner's Guide will lead you through the basics of setting up your Puppet server with plenty of screenshots and real-world solutions. This book is written for system administrators and developers, and anyone else who needs to manage computer systems. You will need to be able to edit text files and run a few commands on the command line, but otherwise no system administration or programming experience is required.

Learning Puppet Toni Schmidbauer 2017 "In this age of digital delivery and an ubiquitous internet presence, it's becoming increasingly important to implement scalable and portable solutions, not only in terms of software but also the systems that run it. Automate all your IT configurations and take control over what you do to each Puppet Agent in a network, including when and how you do it. This video gets you up-and-running with Puppet straightaway using real-world examples. It will take you from a complete beginner to a confident Puppet user. The video will help you to install and set up Puppet and benefit from using Puppet as a configuration management tool for managing your remote servers. It will teach you how to write Puppet code using its Domain Specific Language (DSL) and then deal with big modules and manifests. You will then learn how to use different resource types available with Puppet, writing better manifests, handling dependencies, and using tags to gain more control with Puppet manifests. Finally, you will then go deeper into the DSL, look at dependencies and how Puppet treats individual code blocks; you will also look at how you can manage Cron jobs and run arbitrary commands with Puppet."--Resource description page.

Learning Puppet for Windows Server Fuat Ulugay 2015-08-24 Organize your Windows environment using Puppet tools to unload administrative burdens in a short time! About This Book Learn to install and implement a Puppet server for Windows administration Script Puppet manifests, functions, templates and facts for Windows A step-by-step guide that helps you to make your Windows environment more secure with Puppet Who This Book Is For This book is for Windows administrators who are looking for ways to automate management tasks of Windows servers and clients. Prior experience in Windows administration and a basic knowledge of Linux and Puppet will help you create wonders using this book. What You Will Learn Install Puppet on a Windows server and Foreman interface to have a user-friendly Puppet working environment Discover how to install Puppet agents to single or multiple computers and get your hosts connected to Puppetmaster in one shot Understand all about creating modules, writing manifests, managing files, services and, users in Puppet Learn how to install Puppet Forge modules to complete tasks such as registry management, ACL, and firewall. Explore the usage of Puppet facts, functions and modules to have a deeper understanding of how Puppet functions Manage installation and updates of third party software using Puppet with Chocolatey to completely forgo the manual update chores in your daily plan Use Puppet for Windows security to have a more secure environment In Detail Puppet is a configuration management tool. It allows you to automate all your IT configurations by giving you control of what you do to each "node" (Puppet agent), focusing also on when and how you do it. In context, Puppet is a cross-platform tool that is widely used for Unix-like and Microsoft Windows systems declaratively. However, it has been used more popularly for Unix-like systems. This book provides insights into using Puppet for Windows administration tasks such as server setup, application updates, and service management. This book kicks off with the fundamentals of Puppet by helping you with the installation of Puppet on a Windows server and progresses with the introduction of the Foreman interface for managing Puppet nodes. Next, you deal with the installation of Puppet agents on multiple clients and how to connect them to your Puppet server by grouping your nodes for easy management. You then become familiarized with the scripting of Puppet manifests along with an understanding of the module structure in Puppet. You further move on to the installation of Puppet Forge Modules and their usage in Windows along with advanced topics such as facts, functions and templates. Moreover, you also venture into the security aspects for Windows by gaining insights into various security settings that will make your server and clients more secure from hackers using different attack vectors. You will also use Puppet and Chocolatey to install and update software. You finally round off by learning how to check the details of reporting and status monitoring along with the automation of installing and updating software for multiple Windows clients arming you with ample artillery to tame Puppet for your future projects. Style and approach This book uses a step-by-step and easy-to-learn approach that helps make your Windows environment manageable with Puppet. Each chapter is explained in detail and with many screenshots. Almost all the scenarios and examples are taken from real-world scenarios.

Puppet 4.10 Beginner's Guide, Second Edition John Arundel 2017-05-31 Puppet is great for developers, system administrators, IT professionals, and anyone laying the foundation for DevOps practices - this comprehensive guide will get you up to speed, all the way from installation to automation to the latest features of Puppet 4.10. About This Book* Develop skills to run Puppet 4.10 on single or multiple servers without hiccups* Use Puppet to spin up and manage cloud resources such as Amazon EC2 instances* Take full advantage of the powerful new features of Puppet 4.10, including loops, data types, structured facts, R10K module management, control repos, and EPP templatesWho This Book Is ForPuppet Beginner's Guide, Second Edition is designed for those who are new to Puppet, including system

administrators and developers who are looking to manage computer server systems for configuration management. No prior programming or system administration experience is assumed.What You Will Learn* Covers the latest Puppet 4.10 release* Install and set up Puppet and discover the latest and most advanced features* Configure, build, and run containers in production using Puppet's industry-leading Docker support* Deploy configuration files and templates at super-fast speeds and manage user accounts and access control* Automate your IT infrastructure* Use the latest features in Puppet 4 onward and its official modules* Manage clouds, containers, and orchestration* Get to know the best practices to make Puppet more reliable and increase its performanceIn Detail Puppet 4.10 Beginner's Guide, Second Edition, gets you up and running with the very latest features of Puppet 4.10, including Docker containers, Hieradata, and Amazon AWS cloud orchestration. Go from beginner to confident Puppet user with a series of clear, practical examples to help you manage every aspect of your server setup.Whether you're a developer, a system administrator, or you are simply curious about Puppet, you'll learn Puppet skills that you can put into practice right away. With practical steps giving you the key concepts you need, this book teaches you how to install packages and config files, create users, set up scheduled jobs, provision cloud instances, build containers, and so much more.Every example in this book deals with something real and practical that you're likely to need in your work, and you'll see the complete Puppet code that makes it happen, along with step-by-step instructions for what to type and what output you'll see. All the examples are available in a GitHub repo for you to download and adapt for your own server setup.Style and approachThis tutorial is packed with quick step-by-step instructions that are immediately applicable for beginners. This is an easy-to-read guide, to learn Puppet from scratch, that explains simply and clearly all you need to know to use this essential IT power tool, while applying these solutions to real-world scenarios.

Mastering Puppet 5 Ryan Russell-Yates 2018-09-29 Leverage Puppet 5 for medium to large scale enterprise deployment. Key FeaturesUse and deploy Puppet 5, irrespective of the size of your organizationScaling, performance improvements, and managing multiple developer requestsTroubleshooting techniques, tips and tricks to make the most of Puppet 5Book Description Puppet is a configuration management system and a language written for and by system administrators to manage a large number of systems efficiently and prevent configuration drift. The core topics this book addresses are Puppet's latest features and mastering Puppet Enterprise. You will begin by writing a new Puppet module, gaining an understanding of the guidelines and style of the Puppet community. Following on from this, you will take advantage of the roles and profiles pattern, and you will learn how to structure your code. Next, you will learn how to extend Puppet and write custom facts, functions, types, and providers in Ruby, and also use the new features of Hieradata. You will also learn how to configure the new Code Manager component, and how to ensure code is automatically deployed to (multiple) Puppet servers. Next, you will learn how to integrate Puppet with Jenkins and Git to build an effective workflow for multiple teams, and use the new Puppet Tasks feature and the latest Puppet Orchestrator language extensions. Finally, you will learn how to scale and troubleshoot Puppet. By the end of the book, you will be able to deal with problems of scale and exceptions in your code, automate workflows, and support multiple developers working simultaneously. What you will learnSolve problems using modules and the roles and profiles patternExtend Puppet with custom facts, functions, types, and providersUse Hieradata and Code Manager/10k to separate code from dataContinuously integrate your code using Jenkins, Git and automated testingUse exported resources and the new Puppet Orchestration featuresExplore Puppet Discovery features and their useTroubleshoot various parts of the Puppet Enterprise infrastructureScale up and scale out Puppet infrastructure using various techniquesWho this book is for If you are a system administrator or developer who has used Puppet in production and are looking for ways to easily use Puppet in an enterprise environment, this book is for you. Some knowledge of writing simple configuration management modules would be necessary.

Extending Puppet - Second Edition Alessandro Franceschi 2016-06-24 Start pulling the strings of your infrastructure with Puppet - learn how to configure, customize, and manage your systems more intelligentlyAbout This Book- Explore the wider Puppet ecosystem of useful tools- Design and manage your Puppet architecture for optimum performance- Write more efficient code that keeps your infrastructure more robust Who This Book Is ForIf you are a Puppet user, this book will help you on different levels. If you a beginner, we summarize the key Puppet components and give you the elements to have a broader vision. For more experienced users, you will be surprised by with topics on designing, implementing, adapting, and deploying Puppet architectures. If you are expert, you will find topics and information that is rarely exposed in other books, giving you an insight into Puppet's future and its usage on alternative devices.What You Will Learn- Learn the principles of Puppet language and ecosystem- Extract the features of Hieradata and PuppetDB's power usage- Explore the different approaches to Puppet architecture design- Use Puppet to manage network, cloud, and virtualization devices- Manage and test the Puppet code workflow- Tweak, hack, and adapt the Puppet extension points- Get a run through of the strategies and patterns to introduce Puppet automation- Master the art of writing reusable modulesIn DetailPuppet has changed the way we manage our systems, but Puppet itself is changing and evolving, and so are the ways we are using it. To tackle our IT infrastructure challenges and avoid common errors when designing our architectures, an up-to-date, practical, and focused view of the current and future Puppet evolution is what we need. With Puppet, you define the state of your IT infrastructure, and it automatically enforces the desired state.This book will be your guide to designing and deploying your Puppet architecture. It will help you utilize Puppet to manage your IT infrastructure. Get to grips with Hieradata and learn how to install and configure it, before learning best practices for writing reusable and maintainable code. You will also be able to explore the latest features of Puppet 4, before executing, testing, and deploying Puppet across your systems. As you progress, Extending Puppet takes you through higher abstraction modules, along with tips for effective code workflow management.Finally, you will learn how to develop plugins for Puppet - as well as some useful techniques that can help you to avoid common errors and overcome everyday challenges.Style and approachThis is a collection of specific information about multiple topics related to Puppet and its ecosystem. Starting from a review of the very basics to more advanced topics, mixing practical advice with important theory and broader perspective, along with implementation details.

Puppet 5 Beginner's Guide John Arundel 2017-10-05 Puppet 5 Beginner's Guide, Third Edition is a practical guide that gets you up and running with the very latest features of Puppet 5. About This Book Develop skills to run Puppet 5 on single or multiple servers without hiccups Use Puppet to create and manage cloud resources such as Amazon EC2 instances Take full advantage of powerful new features of Puppet including loops, data types, Hieradata integration, and container management Who This Book Is For Puppet 5 Beginner's Guide, Third Edition is designed for those who are new to Puppet, including system administrators and developers who are looking to manage computer server systems for configuration management. No prior programming or system administration experience is assumed. What You Will Learn Understand the latest Puppet 5 features Install and set up Puppet and discover the latest and most advanced features Configure, build, and run containers in production using Puppet's industry-leading Docker support Deploy configuration files and templates at super-fast speeds and manage user accounts and access control Automate your IT infrastructure Use the latest features in Puppet 5 onward and its official modules Manage clouds, containers, and orchestration Get to know the best practices to make Puppet more reliable and increase its performance In Detail Puppet 5 Beginner's Guide, Third Edition gets you up and running with the very latest features of Puppet 5, including Docker containers, Hieradata, and Amazon AWS cloud orchestration. Go from beginner to confident Puppet user with a series of clear, practical examples to help you manage every aspect of your server setup. Whether you're a developer, a system administrator, or you are simply curious about Puppet, you'll learn Puppet skills that you can put into practice right away. With practical steps giving you the key concepts you need, this book teaches you how to install packages and config files, create users, set up scheduled jobs, provision cloud instances, build containers, and so much more. Every example in this book deals with something real and practical that you're likely to need in your work, and you'll see the complete Puppet code that makes it happen, along with step-by-step instructions for what to type and what output you'll see. All the examples are available in a GitHub repo for you to download and adapt for your own server setup. Style and approach This tutorial is packed with quick step-by-step instructions that are immediately applicable for beginners. This is an easy-to-read guide, to learn Puppet from scratch, that explains simply and clearly all you need to know to use this essential IT power tool, while applying these solutions to real-world scenarios.

Puppet 4 Essentials - Second Edition Felix Frank 2015-12-09 Acquire skills to manage your IT infrastructure effectively with PuppetAbout This Book* Breeze through Puppet 4's key features and performance improvements to bring real advantage to your IT infrastructure* Discover Puppet best practices to help you avoid common mistakes and pitfalls* Blitz through easy-to-follow examples to get to grips with Puppet and succeed with everyday IT automationWho This Book Is ForIf you're an experienced IT professional and a new Puppet user, this book will provide you with all you need to know to go from installation to advanced automation in no time at all. Get a rapid introduction to the essential topics and then tackle Puppet for advanced automation.What You Will Learn* Write and employ individual Puppet manifests* Understand how Puppet implements system abstraction* Deploy the Puppet master and agents* Leverage and extend Facter to summarize your systems* Create modular and reusable Puppet code* Extend your code base with publicly available Puppet modules* Use the modern features of Puppet 4* Separate logic from data using HieradataIn DetailPuppet is a configuration management tool that allows you to automate all your IT configurations, giving you control over what you do to each Puppet Agent in a network, and when and how you do it. In this age of digital delivery and ubiquitous Internet presence, it's becoming increasingly important to implement scalable and portable solutions, not only in terms of software, but also the systems that run it. The free Ruby-based tool Puppet has established itself as the most successful solution to manage any IT infrastructure. Ranging from local development environments through complex data center setups to scalable cloud implementations, Puppet allows you to handle them all with a unified approach.Puppet 4 Essentials, Second Edition gets you started rapidly and intuitively as you'll put Puppet's tools to work right away. It will also highlight the changes associated with performance improvements as well as the new language features in Puppet 4.We'll start with a quick introduction to Puppet to get you managing your IT systems quickly. You will then learn about the Puppet Agent that comes with an all-in-one (AIO) package and can run on multiple systems. Next, we'll show you the Puppet Server for high-performance communication and passenger packages. As you progress through the book, the innovative structure and approach of Puppet will be explained with powerful use cases. The difficulties that are inherent to a complex and powerful tool will no longer be a problem for you as you discover Puppet's fascinating intricacies.By the end of the book, you will not only know how to use Puppet, but also its companion tools Facter and Hieradata, and will be able to leverage the flexibility and expressive power implemented by their tool chain.Style and approachThis quick learning guide for Puppet follows a practical approach, starting with some basic commands that you can use from the shell right away. It comprises a series of examples that will get you familiar with the most important aspects of Puppet in a flash.

Puppet 5 Beginner's Guide - Third Edition John Arundel 2017-10-05 Puppet 5 Beginner's Guide, Third Edition is a practical guide that gets you up and running with the very latest features of Puppet 5.About This Book* Develop skills to run Puppet 5 on single or multiple servers without hiccups* Use Puppet to create and manage cloud resources such as Amazon EC2 instances* Take full advantage of powerful new features of Puppet including loops, data types, Hieradata integration, and container managementWho This Book Is ForPuppet 5 Beginner's Guide, Third Edition is designed for those who are new to Puppet, including system administrators and developers who are looking to manage computer server systems for configuration management. No prior programming or system administration experience is assumed.What You Will Learn* Understand the latest Puppet 5 features* Install and set up Puppet and discover the latest and most advanced features* Configure, build, and run containers in production using Puppet's industry-leading Docker support* Deploy configuration files and templates at super-fast speeds and manage user accounts and access control* Automate your IT infrastructure* Use the latest features in Puppet 5 onward and its official modules* Manage clouds, containers, and orchestration* Get to know the best practices to make Puppet more reliable and increase its performanceIn DetailPuppet 5 Beginner's Guide, Third Edition gets you up and running with the very latest features of Puppet 5, including Docker containers, Hieradata, and Amazon AWS cloud orchestration. Go from beginner to confident Puppet user with a series of clear, practical examples to help you manage every aspect of your server setup.Whether you're a developer, a system administrator, or you are simply curious about Puppet, you'll learn Puppet skills that you can put into practice right away. With practical steps giving you the key concepts you need, this book teaches you how to install packages and config files, create users, set up scheduled jobs, provision cloud instances, build containers, and so much more.Every example in this book deals with something real and practical that you're likely to need in your work, and you'll see the complete Puppet code that makes it happen, along with step-by-step instructions for what to type and what output you'll see. All the examples are available in a GitHub repo for you to download and adapt for your own server setup.Style and approachThis tutorial is packed with quick step-by-step instructions that are immediately applicable for beginners. This is an easy-to-read guide, to learn Puppet from scratch, that explains simply and clearly all you need to know to use this essential IT power tool, while applying these solutions to real-world scenarios.

Learning Puppet Jussi Heinoen 2015-08-31 Build intelligent software stacks with the Puppet configuration management suite About This Book Develop high-quality Puppet modules in an isolated development environment Manage complex development environments with industry-leading configuration management tool A comprehensive guide to get you started with Puppet development and deployment in virtual environments Who This Book Is For If you are new to configuration management and IT automation processes and are looking for better ways to manage system configuration changes at scale, this book is for you. Basic knowledge of Linux System Administration is a prerequisite. What You Will Learn Manage your system with Puppet instantly Develop Puppet in an isolated development environment Make your manifests reusable to avoid re-inventing the wheel Automate monitoring to improve the user experience through increased uptime Enable nodes to communicate with each other via Puppet Master Make environment configuration dynamic using stored configurations and PuppetDB Extend Puppet beyond the built-in functionalities Manage your environment through the Puppet Enterprise console In Detail Puppet is a cross-platform, open source configuration management utility, which runs on various Unix, Linux, and Windows Microsoft platforms. It allows you to automate all your IT configurations, giving you control of what you do to each node, and also when and how you do it. You'll be able to build and manage development, test, and production environments independently without requiring previous system administration experience. Learning Puppet is a step-by-step guide on how to get started with Puppet development and use Puppet modules as the building blocks to deploy production-ready application cluster in virtual environment. You will begin with the installation of development environment on the VirtualBox hypervisor and Puppet Learning VM that will be used as the platform for testing and development of Puppet modules. Next, you will learn how to manage virtual machines and snapshots effectively and enhance the development experience with advanced VirtualBox features. Later the book will focus on Puppet module development in detail. You will be guided through the process of utilizing existing modules that are available in the public module repository, write your own modules and use them to deploy a real-world web application that includes features such as monitoring and load balancing. You will then learn to scale your environment and turn your static configuration into a dynamic one through stored configurations and PuppetDB. Finally, the book will provide you with practical advice on Puppet troubleshooting and managing your environment with the wealth of features provided by the Puppet Enterprise console. Style and approach A comprehensive introductory guide to help you manage your infrastructure with Puppet. All instructions and explanations are supported with screenshots and code examples to ensure you get an easy start with Puppet.

Mastering Puppet for Large Infrastructures 2018 Puppet is a configuration management system that automates IT deployments, allowing administrators to keep machines consistent and up to date. Master Puppet and overcome issues faced in larger deployments, with these practical tutorials that shows real-world examples of Puppet in action. Packt Publishing instructor Thomas Uphill shows how to create a Puppet server machine from scratch and use PuppetDB to store facts (resource information), reports, and exported resources. He also shows how to generate reports, leverage public modules from Puppet Forge or GitHub for custom configurations, and check the syntax of code with two tools: puppet-lint or puppet parser validate. Plus, learn about Puppet best practices, such as adhering to the community style guide. This course was created by Packt Publishing. We are honored to host this training in our library.

Managing Infrastructure with Puppet James Loope 2011-06-09 Get started with Puppet, and learn how this popular configuration management framework helps you automate your servers. This concise introduction shows you how to use Puppet's tools and templates to organize and execute configuration plans on Linux, Unix, and Windows servers. Through code samples and real-world examples, you'll learn how to manage pools of servers and virtual instances, and how to administer access control. If you're new to Puppet, but familiar with

systems administration and Ruby language basics, this book is the ideal way to start using this open source framework. Learn Puppet fundamentals, including its manifest syntax and built-in functions Store configurations in a central location with PuppetMaster, and define which configurations apply to which nodes Build a framework to create user accounts in place of LDAP or Kerberos KDC Apply techniques to execute and manage server configurations with MCollective Use Puppet as an auditing tool to ensure that configurations are correct Gather information on the nodes you manage with the Facter library

Puppet: Mastering Infrastructure Automation Felix Frank 2017-06-13 Start pulling the strings of your IT infrastructure effectively with Puppet - learn how to configure, customize and manage your systems more intelligently in an enterprise deployment. About This Book Step-by-step instructions to jump start your Puppet deployment and automate your IT configurations Design, implement, and deploy Puppet in your infrastructure and tackle everyday IT infrastructure challenges Gain expert understanding of Puppet's latest and most advanced features Who This Book Is For If you're an experienced IT professional and a new Puppet user, this course will provide you with all you need to know to go from installation to advanced automation. What You Will Learn Write and employ individual Puppet manifests Understand how Puppet implements system abstraction Use Puppet to manage network, cloud, and virtualization devices Manage and test the Puppet code workflow Tweak, hack, and adapt the Puppet extension points Use exported resources to orchestrate change between machines Debug a puppetserver using Java techniques In Detail Puppet is a configuration management tool that allows you to automate all your IT configurations, giving you control. It was written for and by system administrators to manage large numbers of systems efficiently and prevent configuration drifts. Puppet gives you control of what you do to each node, when you do it, and how you do it.This Learning Path will take you from the basics of Puppet to extending it and then mastering it. We will start off with a primer on Puppet, its installation and get a sneak peek under its hood. We will then move on to designing and deploying your Puppet architecture, learning best practices for writing reusable and maintainable code, and executing, testing, and deploying Puppet across your systems. Finally, we will deal with problems of scale and exceptions in your code, automate workflows, and support multiple developers working simultaneously.This course is based on the following books: Puppet 4 Essentials - Second Edition Extending Puppet - Second Edition Mastering Puppet - Second Edition Style and approach This learning path follows a practical approach, starting from the basic commands to advanced aspects. Through a series of examples you will learn the most important skills essential to manage your IT infrastructure effectively.

Puppet 5 Essentials Martin Alfke 2017-09-13 A Guide to managing servers and automation About This Book Breeze through Puppet's key features and performance improvements to bring real advantages to your IT infrastructure Discover Puppet best practices to help you avoid common mistakes and pitfalls Examples to help you get to grips with Puppet and succeed with everyday IT automation Who This Book Is For This book targets experienced IT professionals and new Puppet users, who will learn all they need to know to go from installation to advanced automation. Get a rapid introduction to the essential topics and learn how to build best practices for advanced automation with Puppet. What You Will Learn Understand declarative configuration management Make use of GIT-based deployment workflows Extend Facter with secure elements Create modular and reusable Puppet code Extend your code base with publicly available Puppet modules Separate logic from data by using Hieradata Understand and develop Puppet Roles and Profiles In Detail Puppet is a configuration management tool that allows you to automate all your IT configurations, giving you control over what you do to each Puppet Agent in a network, and when and how you do it. In this age of digital delivery and ubiquitous Internet presence, it's becoming increasingly important to implement scalable and portable solutions, not only in terms of software, but also the system that runs it. This book gets you started quickly with Puppet and its tools in the right way. It highlights improvements in Puppet and provides solutions for upgrading. It starts with a quick introduction to Puppet in order to quickly get your IT automation platform in place. Then you learn about the Puppet Agent and its installation and configuration along with Puppet Server and its scaling options. The book adopts an innovative structure and approach, and Puppet is explained with flexible use cases that empower you to manage complex infrastructures easily. Finally, the book will take readers through Puppet and its companion tools such as Facter, Hieradata, and R10k and how to make use of tool chains. Style and approach This book aims to impart all the knowledge required to tap into not only the basics of Puppet, but also its core. The basic ideas and principles of Puppet-based designs are explored and explained. Sophisticated tools are presented to enable you to use Puppet efficiently and productively.

Learning MCollective Jo Rhett 2014-08-13 Orchestrate change across server clusters in near realtime with MCollective, the framework that works in concert with Puppet, Chef, and other configuration management tools. Ideal for system administrators and operations or DevOps engineers at any level, this hands-on guide teaches you how to build and test a real installation of MCollective servers and clients in your environment. Learn how to build an entire installation by hand, know where every configuration file lives, and understand every configuration parameter and what it means. Whether you manage a small environment or one that's immense in scale, this book shows you how to orchestrate specific actions faster and better than you do now. Tour MCollective's architecture, backbone, transport, and security controls Configure MCollective components to match your production environment Create and use collectives to handle thousands of remote MCollective agents Use ActiveMQ Network of Brokers to resolve multi-site or redundancy requirements Learn how to use community-built client and agent plugins, with concrete examples Create your own server and client plugins to perform a variety of actions Learn recommended best practices for using MCollective

Troubleshooting Puppet Thomas Uphill 2015-08-31 Troubleshoot your Puppet infrastructure to leverage your system's performance effectively About This Book Covers major tools in Puppet deployment Fix catalog compilation problems and deal with issues found in larger deployments, such as scaling and improving performance. A fast-paced guide with real-world examples Who This Book Is For If you are a beginner to intermediate Puppet Engineer looking for guidance to help fix problems with your Puppet deployments, this book is for you. What You Will Learn Debug your Puppet infrastructure Use APIs to ensure services are working properly Fix catalog compilation issues Solve problems using Hieradata Tool Detect problems in your environment using PuppetDB Tool Learn ways to format code to aid in identifying errors Troubleshoot errors in modules and templates In Detail Puppet is a configuration management system written for system administrators to manage a large number of systems efficiently and help maintain order. Deploying Puppet becomes more complex as you increase the number of nodes in your environment. The Puppet tool is an intelligent solution that increases the automation footprint for the proactive management of server infrastructures. Puppet's simple programming language is usable on most operating systems and is portable on different deployment environments. We begin by looking at the puppet.conf server configuration file, and talk about possible problems that can occur. What does puppet really do in the background and what options does it provide for troubleshooting? This is what we will explore. Moving on, we will be troubleshooting errors made in modules and templates, finding the best solutions. We will be writing code that will helping us in identify errors. Then we will explain how several ENCs do their job and how puppet communicates with them. We will learn how PuppetDB collects data generated by Puppet. It also enables advanced Puppet features like exported resources, and can be the foundation for other applications that use Puppet's data. By the end of the book we will have learned the best debugging tips for Puppet and PuppetServer. Style and approach This is a quick-paced guide packed with real-world examples and solutions to obstacles in your Puppet infrastructure.

Mastering Puppet - Second Edition Thomas Narrabilis 2016-02-25 Master Puppet for configuration management of your systems in an enterprise deploymentAbout This Book* This book is an advanced guide to using and deploying Puppet 4 in your organization with a special focus on issues faced in larger enterprise deployments* From an experienced author, learn to deal with scaling, performance, and multiple developers with the help of real-world examples* This is the most up-to-date guide on Puppet, and covers the advanced concepts of Puppet 4Who This Book Is ForThis book is for those who have intermediate knowledge of Puppet and are looking to deploy it in their environment. Some idea how to write simple modules for configuration management with Puppet is a prerequisite for this book.What You Will Learn* Scale out your Puppet infrastructure using proxying techniques* Automate your code promotion workflow using Git and r10k* Solve real-world problems using public modules from the Puppet Forge* Use Hieradata to separate the data of your configuration from the code of your configuration* Write your own custom facts in Ruby* Extend Puppet with your own custom facts, modules, and types* Use exported resources to orchestrate change between machines* Debug a puppetserver using Java techniquesIn DetailPuppet is a configuration management system and a language. It was written for and by system administrators to manage large numbers of systems efficiently and prevent configuration drifts.Mastering Puppet deals with the issues faced when scaling out Puppet to handle large numbers of nodes. It will show you how to fit Puppet into your enterprise and allow many developers to work on your Puppet code simultaneously. In addition, you will learn to write custom facts and roll your own modules to solve problems. Next, popular options for performing reporting and orchestration tasks will be introduced in this book. Moving over to troubleshooting techniques, which will be very useful. The concepts presented are useful to any size organization.By the end of the book, you will know how to deal with problems of scale and exceptions in your code, automate workflows, and support multiple developers working simultaneously.Style and approachThis book is a step-wise guide packed with examples to help you configure complex systems in Puppet.

Pulling Strings with Puppet James Turnbull 2008-01-30 Competent system administrators know their success hinges upon being able to perform often tedious tasks with rigor and punctuality. Such metrics are often achieved only by instituting a considerable degree of automation, something that has become even more crucial as IT environments continue to scale both in terms of size and complexity. One of the most powerful system administration tools to be released is Puppet, a solution capable of automating nearly every aspect of a system administrator's job, from user management, to software installation, to even configuring server services such as FTP and LDAP. Pulling Strings with Puppet: Configuration Management Made Easy is the first book to introduce the powerful Puppet system administration tool. Author James Turnbull will guide you through Puppet's key features, showing you how to install and configure the software, create automated Puppet tasks, known as recipes, and even create reporting solutions and extend Puppet further to your own needs. A bonus chapter is included covering the Facter library, which makes it a breeze to automate the retrieval of server configuration details such as IP and MAC addresses.

Pro Puppet James Turnbull 2011-08-18 Pro Puppet is an in-depth guide to installing, using, and developing the popular configuration management tool Puppet. The book is a comprehensive follow-up to the previous title Pulling Strings with Puppet. Puppet provides a way to automate everything from user management to server configuration. You'll learn how to create Puppet recipes, extend Puppet, and use Facter to gather configuration data from your servers. Puppet is a must-have tool for system administrators, and Pro Puppet will teach you how to maximize its capabilities and customize it for your environment. Install and configure Puppet to immediately start automating tasks and create reporting solutions Learn insider tricks and techniques to better manage your infrastructure Become a Puppet expert!

Puppet 5 Essentials Third Edition Martin Alfke 2017-09-13 A Guide to managing servers and automationAbout This Book* Breeze through Puppet's key features and performance improvements to bring real advantages to your IT infrastructure* Discover Puppet best practices to help you avoid common mistakes and pitfalls* Examples to help you get to grips with Puppet and succeed with everyday IT automationWho This Book Is ForThis book targets experienced IT professionals and new Puppet users, who will learn all they need to know to go from installation to advanced automation. Get a rapid introduction to the essential topics and learn how to build best practices for advanced automation with Puppet.What You Will Learn* Understand declarative configuration management* Make use of GIT-based deployment workflows* Extend Facter with secure elements* Create modular and reusable Puppet code* Extend your code base with publicly available Puppet modules* Separate logic from data by using Hieradata* Understand and develop Puppet Roles and ProfilesIn DetailPuppet is a configuration management tool that allows you to automate all your IT configurations, giving you control over what you do to each Puppet Agent in a network, and when and how you do it. In this age of digital delivery and ubiquitous Internet presence, it's becoming increasingly important to implement scalable and portable solutions, not only in terms of software, but also the system that runs it.This book gets you started quickly with Puppet and its tools in the right way. It highlights improvements in Puppet and provides solutions for upgrading. It starts with a quick introduction to Puppet in order to quickly get your IT automation platform in place. Then you learn about the Puppet Agent and its installation and configuration along with Puppet Server and its scaling options. The book adopts an innovative structure and approach, and Puppet is explained with flexible use cases that empower you to manage complex infrastructures easily.Finally, the book will take readers through Puppet and its companion tools such as Facter, Hieradata, and R10k and how to make use of tool chains.Style and approachThis book aims to impart all the knowledge required to tap into not only the basics of Puppet, but also its core. The basic ideas and principles of Puppet-based designs are explored and explained. Sophisticated tools are presented to enable you to use Puppet efficiently and productively.

The Hitchhiker's Guide to Python Kenneth Reitz 2016-08-30 The Hitchhiker's Guide to Python takes the journeyman Pythonista to true expertise. More than any other language, Python was created with the philosophy of simplicity and parsimony. Now 25 years old, Python has become the primary or secondary language (after SQL) for many business users. With popularity comes diversity—and possibly dilution. This guide, collaboratively written by over a hundred members of the Python community, describes best practices currently used by package and application developers. Unlike other books for this audience, The Hitchhiker's Guide is light on reusable code and heavier on design philosophy, directing the reader to excellent sources that already exist.

Learning Puppet 4 Jo Rhett 2016 If you {u2019}re a system administrator, developer, or site reliability engineer responsible for handling hundreds or even thousands of nodes in your network, the Puppet configuration management tool will make your job a whole lot easier. This practical guide shows you what Puppet does, how it works, and how it can provide significant value to your organization. Through hands-on tutorials, DevOps engineer Jo Rhett demonstrates how Puppet manages complex and distributed components to ensure service availability. You {u2019}ll learn how to secure configuration consistency across servers, clients, your router, and even that computer in your pocket by setting up your own testing environment. Learn exactly what Puppet is, why it was created, and what problems it solves Tailor Puppet to your infrastructure with a design that meets your specific needs Write declarative Puppet policies to produce consistency in your systems Build, test, and publish your own Puppet modules Manage network devices such as routers and switches with puppet device and integrated Puppet agents Scale Puppet servers for high availability and performance Explore web dashboards and orchestration tools that supplement and complement Puppet.

Exam Ref 70-532 Developing Microsoft Azure Solutions Zoiner Tejada 2015-02-20 Prepare for Microsoft Exam 70-532—and help demonstrate your real-world mastery of Microsoft Azure solution development. Designed for experienced developers ready to advance their status, Exam Ref focuses on the critical-thinking and decision-making acumen needed for success at the Microsoft Specialist level. Focus on the expertise measured by these objectives: Design and implement Websites Create and manage Virtual Machines Design and implement Cloud Services Design and implement a storage strategy Manage application and network services This Microsoft Exam Ref: Organizes its coverage by exam objectives Features strategic, what-if scenarios to challenge you Will be valuable for Microsoft Azure developers, solution architects, DevOps engineers, and QA engineers Assumes you have experience designing, programming, implementing, automating, and monitoring Microsoft Azure solutions and that you are proficient with tools, techniques, and approaches for building scalable, resilient solutions Developing Microsoft Azure Solutions About the Exam Exam 70-532 focuses on the skills and knowledge needed to develop Microsoft Azure solutions that include websites, virtual machines, cloud services, storage, application services, and network services. About Microsoft Certification Passing this exam earns you a Microsoft Specialist certification in Microsoft Azure, demonstrating your expertise with the Microsoft Azure enterprise-grade cloud platform. You can earn this certification by passing Exam 70-532, Developing Microsoft Azure Solutions; or Exam 70-533, Implementing Microsoft Azure Infrastructure Solutions; or Exam 70-534, Architecting Microsoft Azure Solutions. See full details at: microsoft.com/learning

Mastering Puppet for Large Infrastructures 2018 Learn Puppet, the configuration management system for automating IT deployments. **Learning Path** 2017 "Automation is the ability to orchestrate and integrate tools, people, and processes through a workflow. In this Learning Path, we will look at the most popular tools for automation their advantages, and how to automate effectively with each one of them. We'll cover the why and how of Ansible, Puppet, and Salt, in a step-by-step, progressive manner. Initially, we focus on Ansible. You will learn how to manage environments and implement strategies in Ansible and be introduced to Ansible Galaxy and Tower, which are Ansible's

enterprise tooling for supporting large-scale infrastructure. We then move on to learning Puppet. Puppet is a configuration management tool that allows you to automate all your IT configurations. Using Puppet you can control each Puppet agent in a network. You will learn how to do so by first understanding the Puppet ecosystem and then detailed topics such as configuration and management of Puppet servers, environments, module repositories, and reusable modules. With Salt too, we use a similar approach. We start from the basics, such as installing, configuring, deploying, and managing a web application to advanced concepts like Docker containers across multiple systems behind a HAProxy load balancer. By the end of this Learning Path, you will be able to build and manage your infrastructure and fully utilize its potential."--Resource description page.

Puppet 5.0 Essentials for Configuration Management Abdul Basit Alvi 2018 "Puppet is a configuration management system that automates all your IT configurations and software deployment for Windows and Linux. It gives you control of what you do to each node, when you do it, and how you do it. You will learn to implement consistent configuration across every servers. We will deploy applications to multiple servers. You will learn to build modules by creating your own custom modules. Then avoid and reduce configuration mistakes and downtime with Puppet to overcome problems when using scripts. Finally, we will look into the Windows configuration management and the Git version control."--Resource description page.

Puppet Types and Providers Dan Bode 2012 Puppet's true power exists in the simple resource model it uses to manage the state of complex operating systems. This concise guide shows you how to extend that model and implement custom functionality on top of Puppet by working with the type and provider APIs. Two experts from Puppet Labs explain the concepts behind these APIs, and provide instructions and examples to help you write your own fully functional types and providers. You'll also delve into Puppet's source code to get a better understanding of how types and providers are implemented internally. If you're familiar with basic Puppet concepts, you're ready to get started. Learn the fundamental concepts behind resources, and become familiar with the structure of Puppet's Resource Model Discover

how the type API is used to create new resource types that Puppet can manage Understand how providers interact with the system to achieve the desired state of a declared resource Explore advanced features to get a more complete understanding of how Puppet works Simplify the troubleshooting process when developing types and providers

Pro Puppet Spencer Krum 2014-01-25 Pro Puppet, Second Edition, now updated for Puppet 3, is an in-depth guide to installing, using, and developing the popular configuration management tool Puppet. Puppet provides a way to automate everything from user management to server configuration. You'll learn how Puppet has changed in the latest version, how to use it on a variety of platforms, including Windows, how to work with Puppet modules, and how to use Hiera. Puppet is a must-have tool for system administrators, and Pro Puppet will teach you how to maximize its capabilities and customize it for your environment. Install and configure Puppet to immediately start automating tasks and create reporting solutions Learn insider tricks and techniques to better manage your infrastructure Become a Puppet expert! **Vagrant: Up and Running** Mitchell Hashimoto 2013-05-30 Discover why Vagrant is a must-have tool for thousands of developers and ops engineers. This hands-on guide shows you how to use this open source software to build a virtual machine for any purpose—including a completely sandboxed, fully provisioned development environment right on your desktop. Vagrant creator Mitchell Hashimoto shows you how to share a virtual machine image with members of your team, set up a separate virtualization for each project, and package virtual machines for use by others. This book covers the V1 (1.0.x) configuration syntax running on top of a V2 (1.1+) core, the most stable configuration format running on the latest core. Build a simple virtual machine with just two commands and no configuration Create a development environment that closely resembles production Automate software installation and management with shell scripts, Chef, or Puppet Set up a network interface to access your virtual machine from any computer Use your own editor and browser to develop and test your applications Test complicated multi-machine clusters with a single Vagrantfile Change Vagrant's default operating system to match your production OS Extend Vagrant features with plugins, including components you build yourself