



VMware vRealize Operations Performance and Capacity Management

A hands-on guide to mastering performance and capacity management in a virtual data center

Foreword by:
Ramin Sayar, SVP and GM, Management BU, VMware
Peter Zeglis, VP, Technical Services, VMware, Asia Pacific and Japan



Iwan 'e1' Rahabok

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Vmware Vrealize Operations Performance And Capacity Management

J. Powell



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VMware vRealize Operations Performance and Capacity Management Iwan 'e1' Rahabok, 2014-12-26 If you are an IT professional who is interested in performance management and capacity management in a virtual data center then this book is ideal for you The book is an intermediate level book

VMware Performance and Capacity Management Iwan 'e1' Rahabok, 2016-03-31 Master SDDC Operations with proven best practices About This Book Understand the drawbacks of the traditional paradigm and management that make operations difficult in SDDC Master performance and capacity management in Software Defined Data Center Operationalize performance and capacity monitoring with proven dashboards Who This Book Is For This book is primarily for any system administrator or cloud infrastructure specialist who is interested in performance management and capacity management using VMware technologies This book will also help IT professionals whose area of responsibility is not VMware but who work with the VMware team You can be Windows Linux Storage or Network team or application architects Note that prior exposure to the VMware platform of data center and cloud based solutions is expected What You Will Learn Simplify the task of performance and capacity management Master the counters in vCenter and vRealize Operations and understand their dependency on one another Educate your peers and management on SDDC Operations Complete your SDDC monitoring to include non VMware components Perform SDDC performance troubleshooting Explore real life examples of how super metric and advanced dashboards Introduce and implement a Performance SLA Accomplish your Capacity Management by taking into service tiering and performance SLA In Detail Performance management and capacity management are the two top most issues faced by enterprise IT when doing virtualization Until the first edition of the book there was no in depth coverage on the topic to tackle the issues systematically The second edition expands the first edition with added information and reorganizing the book into three logical parts The first part provides the technical foundation of SDDC Management It explains the difference between a software defined data center and a classic physical data center and how it impacts both architecture and operations From this strategic view it zooms into the most common challenges performance management and capacity management It introduces a new concept called Performance SLA and also a new way of doing capacity management The next part provides the actual solution that you can implement in your environment It puts the theories together and provides real life examples created together with customers It provides the reasons behind each dashboard so that you get the understanding on why it is required and what problem it solves The last part acts as a reference section It provides a complete reference to vSphere and vRealize Operations counters explaining their dependencies and providing practical guidance on the values you should expect in a healthy environment Style and approach This book covers the complex topic of managing performance and capacity in an easy to follow style It relates real world scenarios to topics in order to help you implement the book's teachings on the go

VMware vRealize Operations Essentials Matthew Steiner, 2015-12-31 Harness the power of VMware vRealize Operations

to efficiently manage your IT infrastructure About This Book Extract the optimum performance availability and capacity of your IT infrastructure with the help of vRealize Operations Manager Leverage the power of strategic reports to drive tactful decision making within the IT department A pragmatic guide to proficiently manage your applications and storage Who This Book Is For If you are a vSphere administrator and wish to optimize your virtual environment this book is your go to guide on vRealize Operations As a vSphere administrator it is assumed that you have a good understanding of both physical and virtual infrastructure A basic knowledge of application monitoring and log analysis would be useful when we dive into the capabilities of the solution What You Will Learn Architect design and install vRealize Operations Migrate from the previous vCenter Operations Manager 5 x version configure vR Ops policies and create custom groups Use out of the box Dashboards Views and Reports and create your own customized Dashboards Views and Reports Apply the Alerting framework of Symptoms Recommendations and Actions and create your own Alerting content Leverage the power of Capacity Planning to maximize the utilization of your virtual infrastructure Manage the rest of your infrastructure including storage and applications with vRealize Operations Management Packs Extend the solution with vRealize Hyperic and Log Insight In Detail This book will enable you to deliver on the operational disciplines of Performance Health Capacity Configuration and Compliance by making the best use of solutions provided by vRealize Operations Starting with architecture design and sizing we will ensure your implementation of vRealize Operations is a success We will dive into the utilization of a solution to manage your vSphere infrastructure Then we will employ out of the box Dashboards and the very powerful Views and Reporting functionality of vRealize Operations to create your custom dashboards and address your reporting requirements Next we go through the Alerting framework and how Symptoms Recommendations and Actions are used to achieve efficient operations Later you will master the topic of Capacity Planning where we look at how important it is to craft appropriate policies to match your requirements and we ll consider attitude toward capacity risk which will aid you to build future project requirements into your capacity plans Finally we will look at extending the solution to manage Storage Applications and other IT infrastructures using Management Packs from Solution Exchange as well as how the solution can be enhanced with the integration of Log Insight Style and approach This book is a pragmatic step by step guide that will quickly build your knowledge of the key capabilities of vRealize Operations As well as learning about the solution we will provide you with real world examples that will help you customize and enhance your virtual environment **VMware Performance and Capacity Management, Second Edition**

Iwan 'E1' Rahabok, 2016-03-30 Master SDDC Operations with proven best practices About This Book Understand the drawbacks of the traditional paradigm and management that make operations difficult in SDDC Master performance and capacity management in Software Defined Data Center Operationalize performance and capacity monitoring with proven dashboards Who This Book Is For This book is primarily for any system administrator or cloud infrastructure specialist who is interested in performance management and capacity management

using VMware technologies This book will also help IT professionals whose area of responsibility is not VMware but who work with the VMware team You can be Windows Linux Storage or Network team or application architects Note that prior exposure to the VMware platform of data center and cloud based solutions is expected What You Will Learn Simplify the task of performance and capacity management Master the counters in vCenter and vRealize Operations and understand their dependency on one another Educate your peers and management on SDDC Operations Complete your SDDC monitoring to include non VMware components Perform SDDC performance troubleshooting Explore real life examples of how super metric and advanced dashboards Introduce and implement a Performance SLA Accomplish your Capacity Management by taking into service tiering and performance SLA In Detail Performance management and capacity management are the two top most issues faced by enterprise IT when doing virtualization Until the first edition of the book there was no in depth coverage on the topic to tackle the issues systematically The second edition expands the first edition with added information and reorganizing the book into three logical parts The first part provides the technical foundation of SDDC Management It explains the difference between a software defined data center and a classic physical data center and how it impacts both architecture and operations From this strategic view it zooms into the most common challenges performance management and capacity management It introduces a new concept called Performance SLA and also a new way of doing capacity management The next part provides the actual solution that you can implement in your environment It puts the theories together and provides real life examples created together with customers It provides the reasons behind each dashboard so that you get the understanding on why it is required and what problem it solves The last part acts as a reference section It provides a complete reference to vSphere and vRealize Operations counters explaining their dependencies and providing practical guidance on the values you should expect in a healthy environment Style and approach This book covers the complex topic of managing performance and capacity in an easy to follow style It relates real world scenarios to topics in order to help you implement the book s teachings on the go Mastering vRealize Operations Manager Spas

Kaloferov,Chris Slater,Alasdair Carnie,Scott Norris,2018-03-08 Manage vRealize operations manager 6 6 effectively using this comprehensive guide Key Features Get complete control of capacity management in your virtual environment Display the most appropriate performance metrics and assemble your own dashboard Analyze and process data from different sources into a single repository Optimize vRealize Automation workload placement Book Description In the modern IT world the criticality of managing the health efficiency and compliance of virtualized environments is more important than ever With vRealize Operations Manager 6 6 you can make a difference to your business by being reactive rather than proactive Mastering vRealize Operations Manager helps you streamline your processes and customize the environment to suit your needs You will gain visibility across all devices in the network and retain full control With easy to follow step by step instructions and support images you will quickly master the ability to manipulate your data and display it in a way that best

suits you and your business or technical requirements This book not only covers designing installing and upgrading vRealize Operations 6.6 but also gives you a deep understanding of its building blocks badges alerts super metrics views dashboards management packs and plugins With the new vRealize Operations 6.6 troubleshooting capabilities capacity planning intelligent workload placement and additional monitoring capabilities this book is aimed at ensuring you get the knowledge to manage your virtualized environment as effectively as possible What you will learn Discover advanced vRealize Operations concepts and design your processes effectively for the underlying architecture Plan and install a new version or upgrade from a previous one Apply proven capacity management theories and techniques in practical real world environments Manipulate data and metrics to display them in the most effective way possible Create custom views and dashboards fit for any use case Explore how policies have evolved in vRealize Operations 6.6 and how to apply them in the most effective manner Who this book is for If you are an administrator of a virtual environment and have used vRealize Operations before but want to gain a professional understanding by easily implementing complex tasks with it then this book is for you

VRealize Operations Administrator's Companion Jason Gaudreau, 2015-06-16 vRealize Operations is the ultrasound of your datacenter Without proactive monitoring tools we can only analyze what is on the surface which means we typically respond to IT system issues only after there is a major incident When we have vRealize Operations it gives us a set of tools that helps us analyze the health risk and efficiency of our environment Using a tool like vRealize Operations can assure that you are getting the most out of your VMware vSphere investments by providing proactive insight into the operations of your datacenter Additionally It provides capacity planning and trending into your data center environment and helps ensure you have the required resources to meet the business demand

Mastering VRealize Operations Manager - Second Edition Spas Kaloferov, Scott Norris, Christopher Slater, 2018-03-08 In the modern IT world the criticality of managing the health efficiency and compliance of virtualized environments is more important than ever With vRealize Operations Manager 6.6 you can make a difference to your business by being reactive rather than proactive Mastering vRealize Operations Manager helps you streamline your processes and customize the environment to suit your needs You will gain visibility across all devices in the network and retain full control With easy to follow step by step instructions and support images you will quickly master the ability to manipulate your data and display it in a way that best suits you and your business or technical requirements This book not only covers designing installing and upgrading vRealize Operations 6.6 but also gives you a deep understanding of its building blocks badges alerts super metrics views dashboards management packs and plugins With the new vRealize Operations 6.6 troubleshooting capabilities capacity planning intelligent workload placement and additional monitoring capabilities this book is aimed at ensuring you get the knowledge to manage your virtualized environment as effectively as possible

[Advanced VMware VRealize Operations Manager](#) Scott Norris, 2017 This course starts by teaching you to configure and create alerts based on environment specific symptoms Then we ll walk you through

manipulating metric data using super metrics You will learn how and when to use groups after which we move on to basic dashboard design to deliver easy to consume data in our environment You ll learn how to import custom data and work with relationships Next we ll revamp our basic dashboard and introduce interactivity to it so it can show data on selected objects Finally you will learn how to set up notifications and will be equipped to manage run and use vROps within you own environment Resource description page

VMware Specialist - vRealize Operations Exclusive Practice Tests - NEW Version G Skills, This New and Exclusive Book tests a candidate s skills and abilities installing configuring and managing a VMware vRealize Operations environment Here we ve brought best Exam Practice Questions for VMware Specialist vRealize Operations exam so that you can prepare well for this exam The questions are designed in consideration of the language and testing methodology used in an actual VMware exam This will help any VMware aspirant to face the official exam with increased confidence This book covers all the latest VMware Review Manual Exam time is 80 minutes Welcome *Learning VMware VRealize Operations Manager* Scott Norris,2016 VRealize Operations Manager is used to analyze and process data from different sources into a single repository thus allowing you to understand every layer of your environment This course will start off by diving into the basics of how to read and manage vRealize Operations from understanding the layout of the UI granting people access bring data into vRealize Operations with solutions and understanding the badge system This introduction to the basics will build a solid foundation on which we will further build with later modules It will move beyond the standard product documentation and explain both why and how vRealize Operations should be deployed configured and used in your environment The targeted version of this course is 6 3 x but it is backward compatible down to version 6 0 This course will help you gain a deep understanding of vRealize Operations and will teach you how to best apply the product to everyday operations management use cases Resource description page *Learning Path* ,2017 This Learning Path starts by familiarizing you with the VROps UI It explains both why and how vRealize Operations should be deployed configured and used in your environment Then you will learn how to create alerts based on environment specific symptoms how to manipulate metric data using super metrics how and when to use groups how to deliver easy to consume data in your environment using the basic dashboard design how to import custom data and work with relationships and finally how to trigger events with notifications By the end of the Learning Path you will know how to analyze and optimize your IT environment Resource description page *Building VMware Software-Defined Data Centers* Valentin Hamburger,2016-12-12 Make the most of software defined data centers with revolutionary VMware technologies About This Book Learn how you can automate your data center operations and deploy and manage applications and services across your public private and hybrid infrastructure in minutes Drive great business results with cost effective solutions without compromising on ease security and controls Transform your business processes and operations in a way that delivers any application anywhere with complete peace of mind Who This Book Is For If you are an IT professional or VMware

administrator who virtualizes data centers and IT infrastructures this book is for you Developers and DevOps engineers who deploy applications and services would also find this book useful Data center architects and those at the CXO level who make decisions will appreciate the value in the content What You Will Learn Understand and optimize end to end processes in your data center Translate IT processes and business needs into a technical design Apply and create vRO workflow automation functionalities to services Deploy NSX in a virtual environment Technically accomplish DevOps offerings Set up and use vROPs to master the SDDC resource demands Troubleshoot all the components of SDDC In Detail VMware offers the industry leading software defined data center SDDC architecture that combines compute storage networking and management offerings into a single unified platform This book uses the most up to date cutting edge VMware products to help you deliver a complete unified hybrid cloud experience within your infrastructure It will help you build a unified hybrid cloud based on SDDC architecture and practices to deliver a fully virtualized infrastructure with cost effective IT outcomes In the process you will use some of the most advanced VMware products such as VSphere VCloud and NSX You will learn how to use vSphere virtualization in a software defined approach which will help you to achieve a fully virtualized infrastructure and to extend this infrastructure for compute network and storage related data center services You will also learn how to use EVO RAIL Next you will see how to provision applications and IT services on private clouds or IaaS with seamless accessibility and mobility across the hybrid environment This book will ensure you develop an SDDC approach for your datacenter that fulfills your organization s needs and tremendously boosts your agility and flexibility It will also teach you how to draft design and deploy toolsets and software to automate your datacenter and speed up IT delivery to meet your lines of businesses demands At the end you will build unified hybrid clouds that dramatically boost your IT outcomes Style and approach With the ever changing nature of businesses and enterprises having the capability to navigate through the complexities is of utmost importance This book takes an approach that combines industry expertise with revolutionary VMware products to deliver a complete SDDC experience through practical examples and techniques with proven cost effective benefits

VMware vRealize Configuration Manager Cookbook Abhijeet Shriram Janwalkar, 2016-07-08 Over 80 recipes to teach you the power of vRealize Configuration Manager 5.8 to provide automated and continuous configuration management About This Book First book in the market that provides a broad configuration and compliance management solution for your enterprise Champion the skills of the latest features of VMware vRealize Configuration Manager and implement it in your organization A recipe based approach book that will enlighten you to configure VCM to collect and manage data from your virtual and physical environment Who This Book Is For If you are a system administrator who is eager to provide better administration with VCM and are familiar with managing network users and resources along with performing system maintenance then this book is for you What You Will Learn Find out how to configure automated patching of your infrastructure for Windows as well Unix machines Maintain and upgrade your vRealize Configuration Manager Integrate with other VMware tools such as vCloud

Director vRealize Operations vCenter and vCloud Network and Security Understand what vRealize Configuration Manager is and what its capacities are Explore how vRealize Configuration Manager can be used for patching compliance management and software distribution Troubleshoot vRealize Configuration Manager with ease In Detail VMware vRealize Configuration Manager VCM helps you to automate IT operations manage performance and gain visibility across physical and virtual infrastructure It is continuously being used by enterprises to audit the configurations of the VMware infrastructure as well as the Windows Linux and UNIX operating systems This book is filled with practical recipes through which you will learn about the latest features of vRealize Configuration Manager 5.8 X starting with installation of various tiers of VCM followed by configuration management across physical and virtual servers Throughout this book you will explore how VCM can perform tasks such as patch management compliance assessment and software package distribution along with Machine filters for new platforms such as RHEL 7 and Windows 10 This book will ease your troubles while upgrading from the existing VCM to the latest version by providing you with step by step instructions about the process of migration along with upgrade and maintenance support This book will help you understand how to integrate vRealize Configuration with other applications along with schedule management and also guide you on how to handle security issues After reading this book you will have a clear understanding of how VCM fits in the overall picture of the data center design from a patching and compliance perspective Style and approach This book takes a recipe based approach that will provide you with an effective and a practical configuration management solution for your enterprise *VMware Software-Defined Storage* Martin

Hosken, 2016-08-29 The inside guide to the next generation of data storage technology VMware Software Defined Storage A Guide to the Policy Driven Software Defined Storage Era presents the most in depth look at VMware's next generation storage technology to help solutions architects and operational teams maximize quality storage design Written by a double VMware Certified Design Expert this book delves into the design factors and capabilities of Virtual SAN and Virtual Volumes to provide a uniquely detailed examination of the software defined storage model Storage as a Service STaaS is discussed in terms of deployment through VMware technology with insight into the provisioning of storage resources and operational management while legacy storage and storage protocol concepts provide context and demonstrate how Virtual SAN and Virtual Volumes are meeting traditional challenges The discussion on architecture emphasizes the economies of storage alongside specific design factors for next generation VMware based storage solutions and is followed by an example in which a solution is created based on the preferred option identified from a selection of cross site design options Storage hardware lifecycle management is an ongoing challenge for IT organizations and service providers VMware is addressing these challenges through the software defined storage model and Virtual SAN and Virtual Volumes technologies this book provides unprecedented detail and expert guidance on the future of storage Understand the architectural design factors of VMware based storage Learn best practices for Virtual SAN stretched architecture implementation Deploy STaaS through vRealize

Automation and vRealize Orchestrator Meet traditional storage challenges with next generation storage technology Virtual SAN and Virtual Volumes are leading the way in efficiency automation and simplification while maintaining enterprise class features and performance As organizations around the world are looking to cut costs without sacrificing performance availability or scalability VMware based next generation storage solutions are the ideal platform for tomorrow s virtual infrastructure VMware Software Defined Storage provides detailed practical guidance on the model that is set to transform all aspects of vSphere data center storage

Mastering VMware vSphere 6 Nick Marshall, 2015-03-24 Master your virtual environment with the ultimate vSphere guide Mastering VMware vSphere 6 is the fully updated edition of the bestselling guide to VMware s virtualization solution With comprehensive coverage of this industry leading toolset this book acts as an informative guide and valuable reference Step by step instruction walks you through installation configuration operation security processes and much more as you conquer the management and automation of your virtual environment Written by certified VMware vExperts this indispensable guide provides hands on instruction and detailed conceptual explanations anchored by practical applications and real world examples This book is the ultimate guide to vSphere helping administrators master their virtual environment Learn to Install configure and manage the vCenter Server components Leverage the Support Tools to provide maintenance and updates Create and configure virtual networks storage devices and virtual machines Implement the latest features to ensure compatibility and flexibility Manage resource allocation and utilization to meet application needs Monitor infrastructure performance and availability Automate and orchestrate routine administrative tasks Mastering VMware vSphere 6 is what you need to stay up to date on VMware s industry leading software for the virtualized datacenter

Mastering VRealize Automation 6.2 J. Powell, 2015-07-31 Enable virtualization automation and efficient cloud management in your environment with vRealize Automation 6 2 About This Book Learn the best practices of system architecture and design of the newly released vRealize Automation 6 2 Resolve common pitfalls during the configuration and customization process by exploring complex topics such as cloud provisioning An easy to follow guide that will help you to become the go to person for vRealize Automation in your organization Who This Book Is For Mastering vRealize Automation 6 2 is intended for readers who already have advanced knowledge of vCenter and want to utilize automation and orchestration to provision their infrastructure However no previous experience with vRealize Automation is necessary If you want design best practices step by step implementation guidance and real world configuration examples this book will be the perfect companion What You Will Learn Master Installation configuration and customization vRealize Automation 6 2 Integrate SCCM Kickstart and WIM deployment servers with vRealize Automation Easy to follow integration steps for using vRealize Orchestrator Operations Manager and Application Services with vRealize Automation 6 2 Avoid common pitfalls during the configuration and customization process Integrate vRealize Application Services and Orchestrator vRealize Automation design concepts and best practices for small medium or large enterprise environments Create Approval

Policies to govern the amount of resources end users can consume when provisioning infrastructure Create multiple machine blueprints to leverage the existing deployment methods in your environmentIn DetailvRealize Automation 6 2 orchestrates the provisioning of infrastructure applications and customized services delivered from a self service web portal Administrators provide end users resources to consume such as Operating Systems and Applications through a customized web portal and catalog From the end user perspective its like shopping for IT resources through an online merchant portal Administrators get to offload the repetitive portions of their job such as building VMs by creating Blueprints that deploy VMs on demand This ensures uniformity in the VMs and timeliness in their delivery while providing agility for the IT team to handle other responsibilities outside of provisioning infrastructure and applications The book opens with an overview of the history and features of vRealize Automation and moves into the basic components required to set up vRA as well as some of the best practices You are guided through the steps to design your vRealize Automation environment and introduced to integration point including SCCM and Kickstart deployments as well as Linked Clones You will learn about Approval Policies and why they are useful for your infrastructure and how to efficiently set them up You will learn how to integrate other products such as vRealize Operations Manager and Orchestrator Throughout the book you are provided insights into some of the common errors and pitfalls that occur during installation and maintenance as well as how to resolve them Finally the book provides a valuable list of references to enhance your knowledge of vRealize Automation 6 2 Style and approachAn advanced guide filled with real world examples to master installation configuration and customization of vRealize Automation 6 2 and its features such as vRealize Orchestrator and vRealize Application Services **Vmware Vcenter Operations Manager Essentials** ,2014 **Mastering VRealize Automation 7. 1** Guido Soeldner,2016-10-24 Master your cloud environment with the ultimate vRealize Automation guideMastering vRealize Automation 7 1 is the fully updated edition of the comprehensive guide to VMware s cloud management platform solution With extensive coverage of the vRealize Automation platform this book acts as an informative guide and valuable reference Step by step instruction walks you through design installation configuration operation extensibility and much more Written by certified VMware vExperts this guide provides hands on instruction and detailed conceptual explanations anchored by practical applications and real world examples This book is the ultimate guide to vRealize Automation helping administrators architects and developers master their virtual environment Learn to Design install configure and manage a vRealize Automation cloud environment How to use and design blueprints Integrate NSX to provide automated network isolation and micro segmentation Manage resource allocation and utilization to meet application needs Monitor infrastructure performance and availability with vRealize Operations and Log Insight Use vRealize Orchestrator to automate and integrate third party productsMastering vRealize Automation 7 is what you need to stay up to date on VMware s industry leading software for building up a cloud management platform **600 Specialized Interview Questions for VMware Administrators: Deploy and Maintain Virtual**

Infrastructure CloudRoar Consulting Services,2025-08-15 Virtualization continues to be the backbone of modern IT infrastructure and VMware Administrators play a crucial role in ensuring performance scalability and business continuity Whether managing enterprise data centers or optimizing hybrid cloud environments VMware professionals are in constant demand Preparing for interviews in this domain requires not only technical expertise but also hands on problem solving skills 600 Interview Questions Answers for VMware Administrators CloudRoar Consulting Services is designed to help you excel in interviews for VMware administration roles With 600 carefully selected Q A sets this book provides practical insights into both foundational and advanced VMware concepts Key areas covered include VMware vSphere ESXi installation configuration and lifecycle management vCenter Server deployment management and troubleshooting VMware Networking distributed switches VLANs NSX basics and traffic management VMware Storage VMFS NFS vSAN storage policies and performance optimization High Availability Disaster Recovery vSphere HA DRS FT SRM and backup strategies Performance Tuning Monitoring resource pools alarms capacity planning and log analysis Cloud Integration VMware Cloud on AWS hybrid cloud deployment models and migration strategies Security Compliance role based access hardening ESXi and encryption practices This guide is ideal for VMware Administrators preparing for interviews System and Infrastructure Engineers expanding their VMware expertise IT professionals preparing for VMware certifications such as VCP DCV 2V0 21 23 Data center and cloud engineers seeking practical Q A based preparation The Q A format is structured to simulate real interview environments including scenario based problem solving troubleshooting questions and best practice discussions By working through these 600 questions and answers you ll gain the confidence to approach technical interviews with precision and authority Whether your focus is on virtualization administration cloud migration or VMware certification readiness this book equips you with the knowledge to stand out as a highly skilled VMware professional in a competitive job market *VMware Horizon View 6 Desktop Virtualization Cookbook* Jason Ventresco,2014-10-31 If you want a more detailed explanation concerning the implementation of several different core features of VMware Horizon View this is the book for you Whether you are new to VMware Horizon View or an existing user this book will provide you with the knowledge you need to successfully deploy several core features and get introduced to the latest features of version 6 0 as well

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VMware Vrealize Operations Performance And Capacity Management Introduction

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