

# Predictive VM Management

Virtual machines (VMs) created a revolution in infrastructure, and the result? VMs everywhere!

With a scale of hundreds or thousands of VMs in datacenters, it's time to take advantage of predictive AI to herd the VMs spread across your environments, from on-prem to the edge!

## Key Terms

### Self-driving operations:

- ▶ A strategy for automating and simplifying Ops management by using AI to solve IT problems

### Predictive forecasting:

- ▶ AI-powered workload balancing and placement, capacity forecasting, right-sizing and predictive Distributed Resource Scheduling (pDRS)

### Predictive Distributed Resource Scheduling (pDRS):

- ▶ Low overhead monitoring that builds dynamic, tailored thresholds to orchestrate VMs as performance and scalability needs change over time

### XaaS:

- ▶ Anything-as-a-Service. The ongoing trend that ANY offering can be delivered as an on-demand or subscription based service. Cars, CRMs, storage, bananas...



IT Ops has been left behind for the data **THEY** need—like today's app performance vs. last month, and data-based predictions about future needs...

(LEAP TO CHAPTER 1)

- ▶ Modern datacenters (DCs) are more powerful AND more complex than ever
- ▶ Add virtual, cloud, and XaaS on top of on-prem and your extended DC could literally be spread around the world
- ▶ Managing all that is hard as coconuts... anticipating future needs has been close to voodoo in the past



AI is treated like “magic,” but in IT Ops, AI can head off issues, speed up issue resolution, and augment your Ops monkeys

(LEAP TO CHAPTER 1)

- ▶ vRealize Operations (vROps) uses AI throughout the Ops lifecycle
- ▶ Predictive forecasting for short-term balancing, right-sizing and pDRS
- ▶ Provides a Troubleshooting Workbench for smarter and focused root cause analysis, identifying issues for fast reactions
- ▶ Uses an action framework to shorten the Mean Time to Resolve (MTTR) issues



Automatic trouble remediation = the new bare minimum. Don't settle for manual-only tools. The Next Gen includes...

(LEAP TO CHAPTER 3)

- ▶ Automated Workload Optimization—ability to move active VMs from one cluster to another, proactively preventing bottlenecks
- ▶ vROps Automated Actions—20 different actions for objects managed by vCenter. Triggered by alerts or manually, as needed
- ▶ vRealize Orchestrator Integrated Actions—take automated actions to the next level with vRealize Orchestrator for more complex automations
- ▶ Webhooks—to integrate into other alerting and monitoring solutions to round out your toolkit



The big shift from reactive to predictive Ops is underway. Would you rather prevent a fire? Or have to put it out? #firebad!

(LEAP TO CHAPTER 3)

- ▶ The history of IT is about **being reactive** to inevitable problems, but that's old school Ops thinking
- ▶ The next shift = **balance**. Move beyond traditional load-balancing of two devices, to balancing across multiple clusters and more complex environments
- ▶ Lazy/Smart monkey heaven = **proactive**. pDRS learns the history of resource consumption, and adjusts VMs based on explicit knowledge of the VMs and apps that they run

## Download the Full Gorilla Guide!

Would you like to take your VMware vSphere infrastructure to the next level? Read the new Gorilla Guide to... VMware vRealize Operations to help you optimize, plan, and scale your software-defined datacenter!

In this book you'll learn about the many benefits of vROps, how to deploy it, configure it, and use it to enable unified management, intelligent remediation, and self-driving operations.

### Highlights include:

- ▶ How to get started with vRealize Operations
- ▶ How to deploy and configure vRealize Operations
- ▶ What's new in vRealize Operations

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