

1. VOA Configuration Cover



The image shows a presentation slide for the vSphere Optimization Assessment. The top half features a dark blue header with the title "vSphere Optimization Assessment" and a subtitle "Experience the Power of Operations Management". To the right of the text are three circular icons labeled "Assess", "Identify", and "Optimize", each in a different color (grey, blue, and light blue). The bottom half has a light grey background with the text "Optimize Configuration Report" on the left and the VMware logo on the right.

vSphere Optimization Assessment

Experience the Power of Operations Management

Assess Identify Optimize

Optimize Configuration Report

vmware®

2. VOA Configuration Overview

This report provides an overview of the configuration of resource providers (clusters and hosts) and resource consumers (virtual machines). Consistent configuration of your vSphere environment provides better availability, performance and supportability for applications in your Software Defined Datacenter (SDDC).

Understanding the current state of your private cloud also helps with planning upgrades and efficiency improvements. It also provides a baseline to measure how well the management of your environment has improved as you use vRealize Operations to manage and maintain.

With vRealize Operations, it is easy to get complete visibility into the health and fitness of vSphere and ensure you are delivering the best service possible and taking advantages of all capabilities VMware offers.

3. VOA Configuration Cluster Overview

The vSphere cluster is comprised of a number of ESXi hosts to provide economic benefits of scaling capacity as well as application availability.

Within the cluster, key features are enabled to deliver the value that VMware provides through vSphere. These features are covered in the following pages with explanation of the function and benefit of using each.

4. VOA Report Configuration Cluster DRS

DRS Configuration

Distributed Resource Scheduling is a reliable and proven feature of vSphere that monitors and maintains performance for virtual machines by moving VMs between ESXi hosts when required to meet application demands.

When coupled with vRealize Operations, DRS will proactively move VMs by intelligently evaluating the historical demand within the cluster.

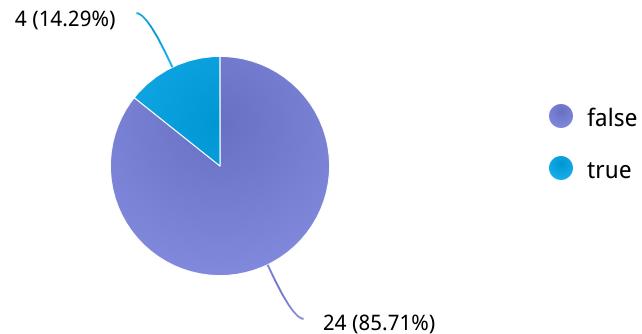
DRS should be **enabled** and **fully automated** on your clusters to get the most benefit.

Want more details?

Check out Workload Placement in vRealize Operations to manage resources across clusters.

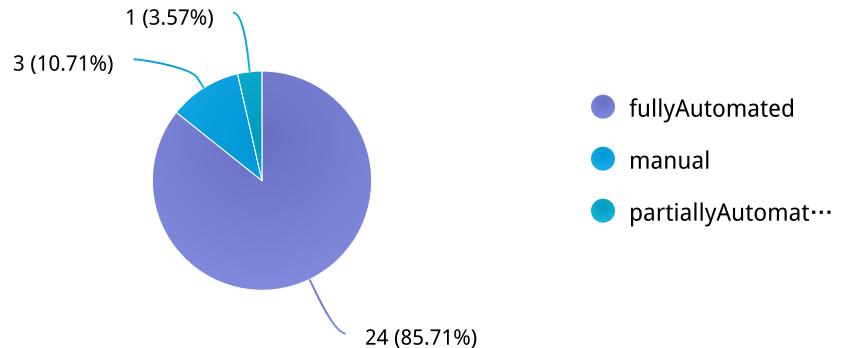
vSphere Cluster DRS Status

DRS Enabled



vSphere Cluster DRS Automation

DRS Automation Level



5. VOA Report Configuration Cluster HA

Cluster High Availability

High Availability (HA) is a feature of vSphere clustering that prevents application outages due to hardware failure. With HA enabled, your cluster will restart VMs that have been impacted by an ESXi host outage.

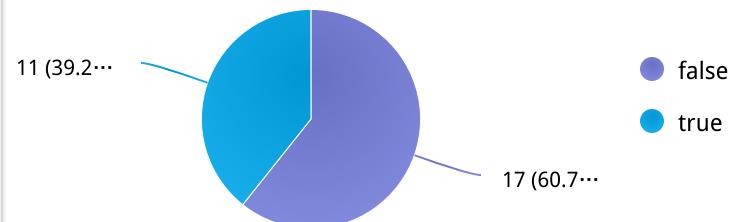
Here, you will find the status of HA within your SDDC. [The HA Status chart shows how widely you have enabled HA](#); you may have some clusters that do not have this important capability enabled. When you enable HA, the [Admission Control setting helps you avoid over-subscribing the cluster](#). This enforces your selected HA overhead policy (for example, N+1) by maintaining enough buffer capacity to restart virtual machines on failed hosts.

Want more details?

For more information, check out the [Cluster Configuration dashboard](#) in vRealize Operations.

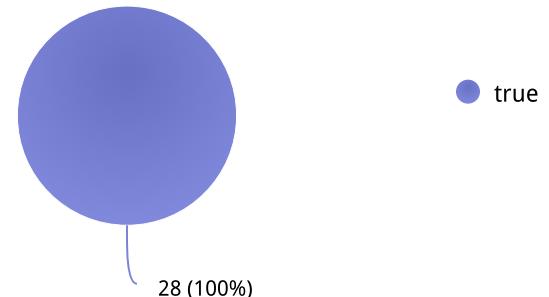
vSphere Cluster HA Status

HA Enabled?



vSphere Cluster Admission Control

Admission Control Enabled?



6. VOA Host Configuration Overview

ESXi is the vSphere hypervisor and provides compute, memory, network and storage resources for VMs. Properly configured and well-maintained hosts provide stable environment within your SDDC.

7. VOA Report Configuration Host Status

Host Connectivity and Availability

It is obvious that when a host is unavailable, you're not running your SDDC at full capacity. However, managing 100s or even 1000s of hosts can be challenging.

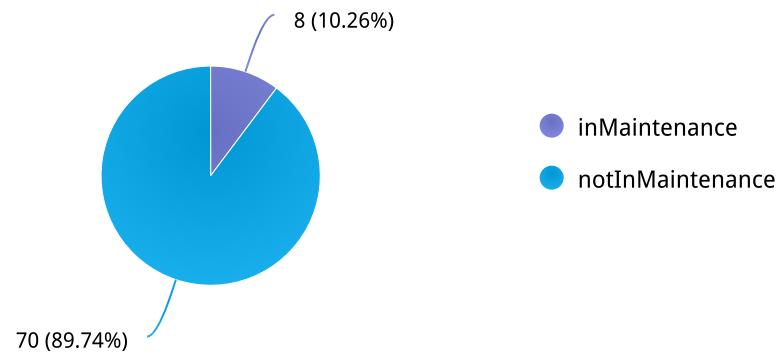
Are all of your hosts connected and providing resources?

Did you know?

When you are troubleshooting host problems you can launch the vSphere client from vRealize Operations to configure or reconnect a host.

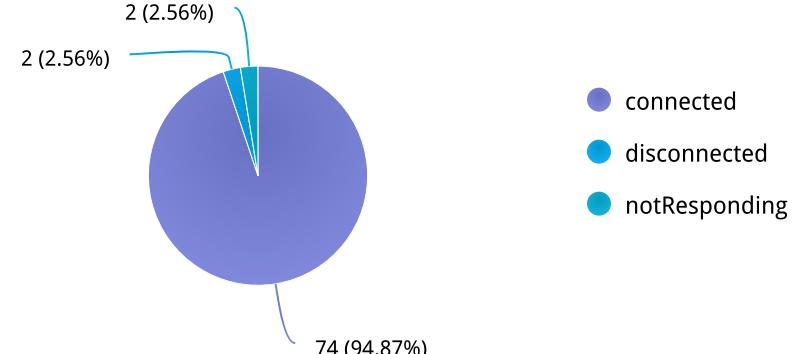
vSphere Hosts in Maintenance Mode

Maintenance Status



vSphere Host Connection State

Connection State



8. VOA Report Configuration Host Services

NTP and SSH Services

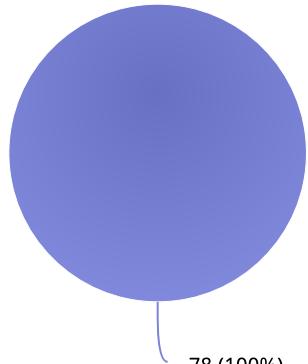
An ESXi host runs many services, but a couple of them are critical enough to get special attention.

It is important to have consistent time on all objects in the SDDC. Properly configured and running [NTP services](#) help with everything from connectivity, to security and even logging.

[SSH](#), while helpful when you need remote access to an ESXi host, provides an attack vector and should normally be disabled when not in use.

vSphere Hosts NTP Service Status

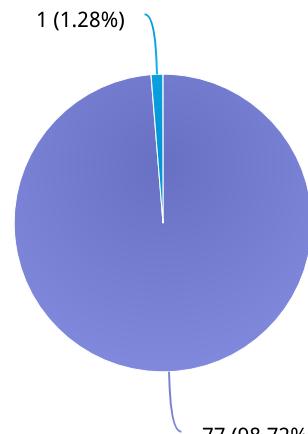
vSphere Hosts NTP Service Status



● true

vSphere Host SSH Service Status

vSphere Hosts SSH Service Status



- false
- true

9. VOA Report Configuration Host Model and Version

Host Model and ESXi Version

You know that ESXi abstracts underlying hardware to provide virtual compute for your VMs. However, features such as vMotion and DRS require that you have consistent CPU architecture within a cluster to provide live migration of VMs without downtime.

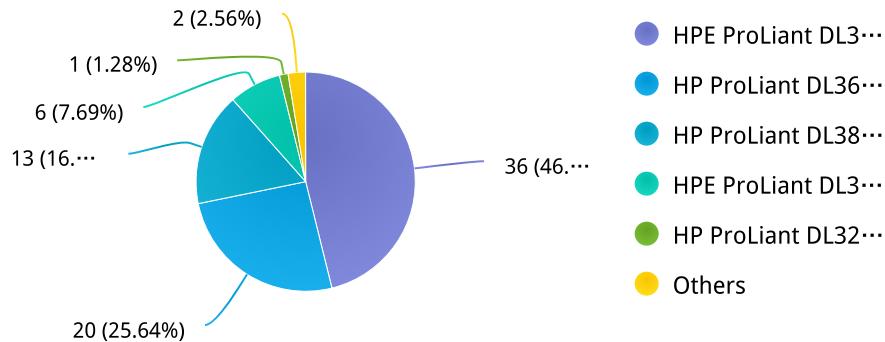
Additionally, **inconsistent host build versions** should be addressed to avoid lapses in security patches or bug fixes. Note that you may have all hosts running ESXi 6.0.0, but they could be running different build levels.

Do you need Cost Visibility?

vRealize Operations provides detailed cost information about your SDDC, based on the hardware you have deployed. You can configure this in [Administration > Configuration > Cost Controls](#).

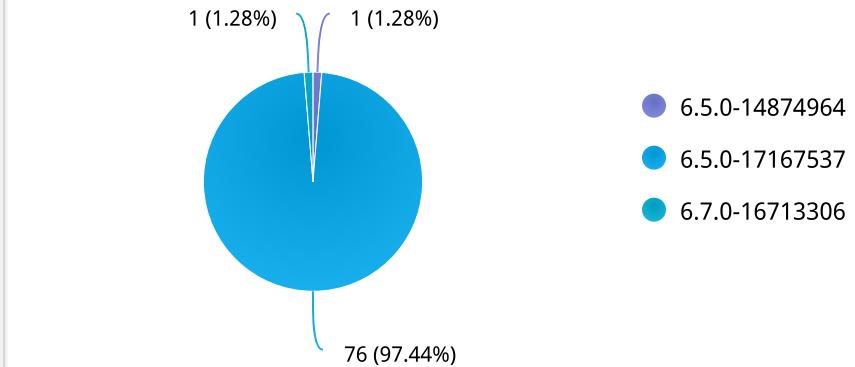
vSphere Host Hardware Model

Hardware Model



vSphere Host Version

vSphere Host Version



10. VOA VM Configuration Overview

Virtual Machines deliver the platform for your OS and applications to run, and this means VMs deliver the goals of your business or organization. In the following pages you will be able to see important configuration details about your virtual machines' configuration. Not only does vRealize Operations provide deep visibility for virtual machines, but also your OS and applications.

11. VOA Report Configuration VM OS

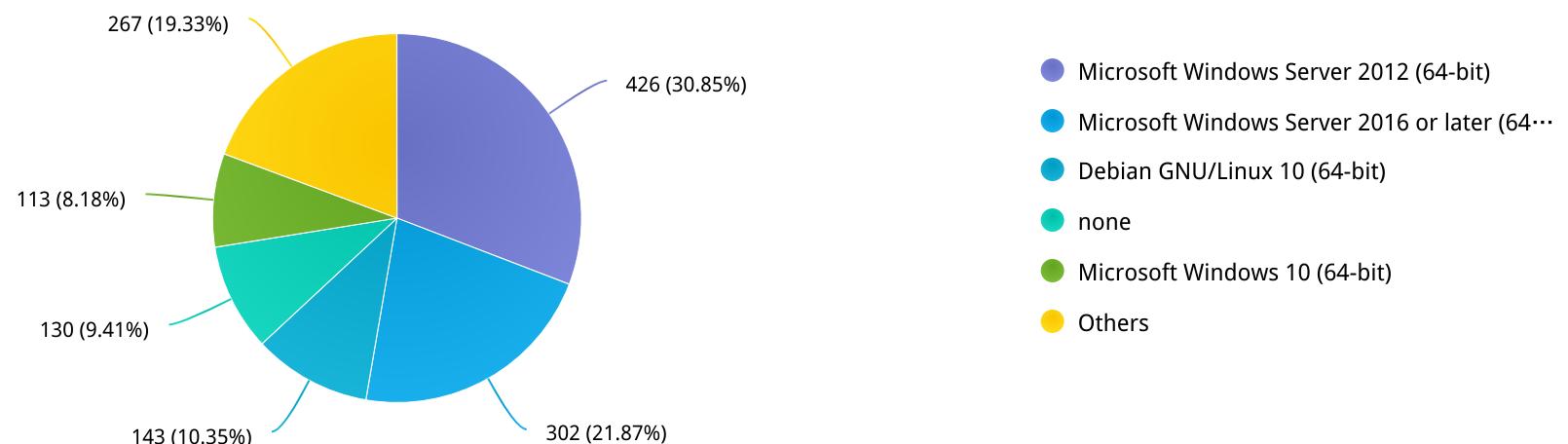
Guest OS Versions

Many customers find it challenging to monitor the OS types and versions running in their SDDC. In this chart you can see which OSes are installed, including architecture and version.

Supportability for the SDDC doesn't stop at the virtual machine; so it is important to make sure that you are aware of any "End of Life" OS versions to maintain reliability and security.

Virtual Machines OS Distribution

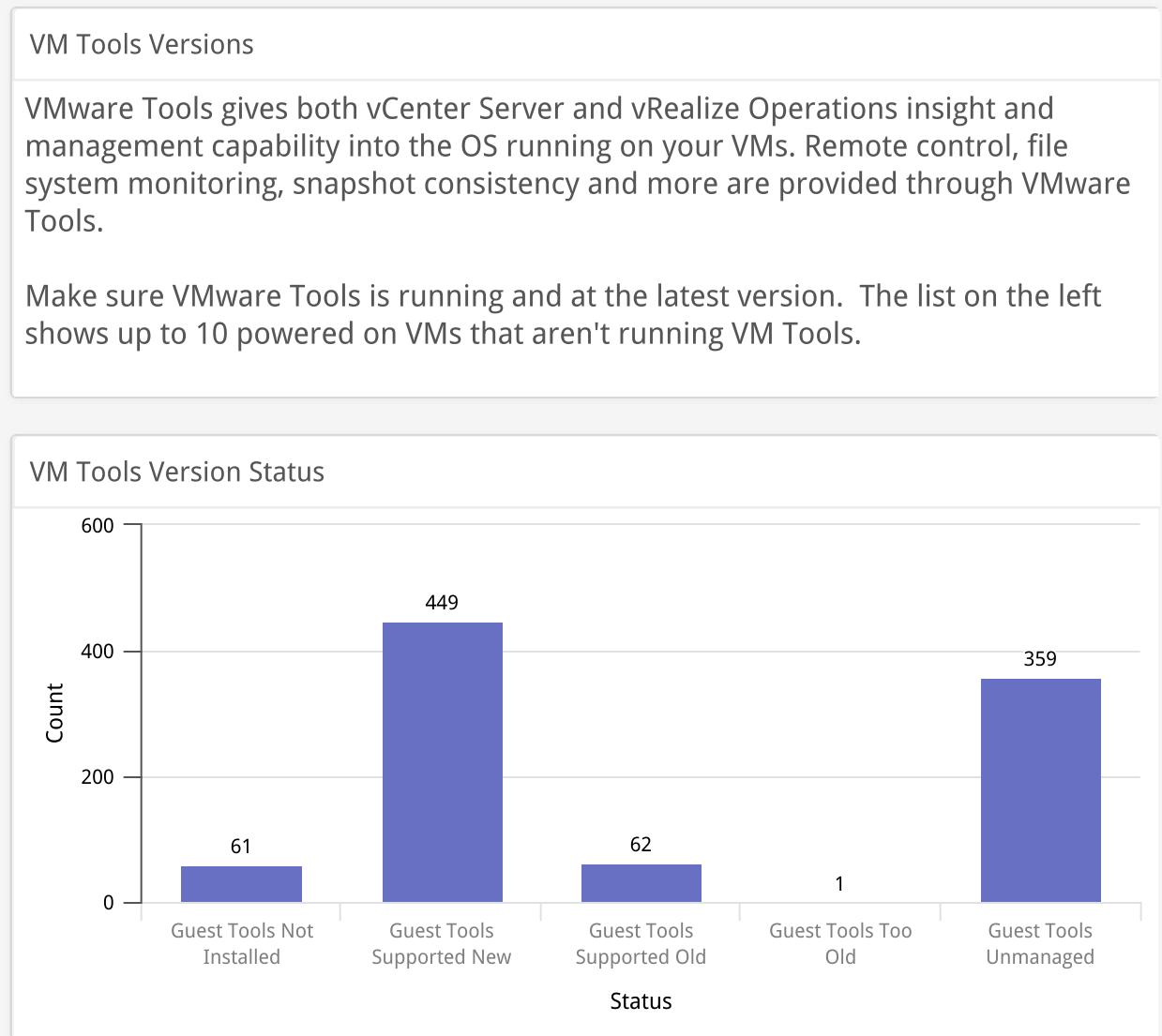
Guest Operating System



12. VOA Report Configuration VM Tools

Tools Not Running	
Name	Tools Status
GVALXTEA1	Guest Tools Not Run...
GVATIVCA	Guest Tools Not Run...
GVATTN	Guest Tools Not Run...
HOULXTEA1	Guest Tools Not Run...
HOUTESTW10_1	Guest Tools Not Run...
LDNLXPTEA1	Guest Tools Not Run...
LDNTTN	Guest Tools Not Run...
MOSPCTXDC2	Guest Tools Not Run...
RDMPCXXDC1	Guest Tools Not Run...
RDMPCXXDC2	Guest Tools Not Run...

1 - 10 of 14 items ◀ 1 2 ▶



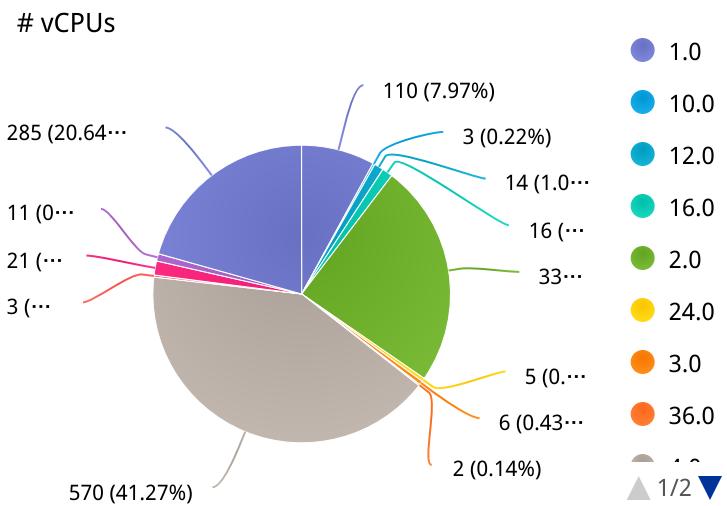
13. VOA Report Configuration VM Compute

CPU and RAM Allocation

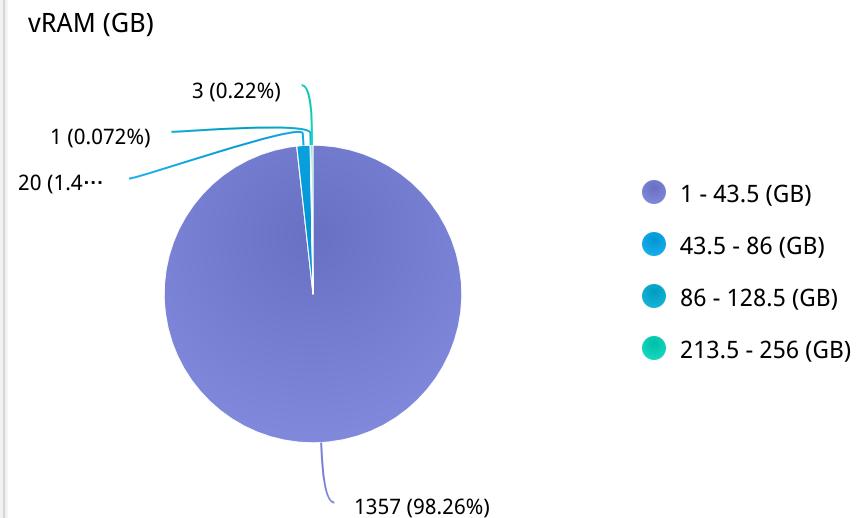
Here you can see the resources allocated to VMs for CPU and vRAM.

vRAM is displayed as no more than 6 buckets evenly distributed between the minimum and maximum vRAM allocation in your SDDC.

VM vCPU Allocation



VM vRAM Allocation



14. VOA Report Configuration VM Compute Limits

VMs with Limits		
Name	CPU Limit	Memory Limit
eptsbc	4,800 MHz	4,194,304 KB
GVAPQVF1	-1 MHz	253,952,000 KB
GVAPQVP1	-1 MHz	61,440,000 KB
HAMSBC1	131,718 MHz	4,194,304 KB
HOUSBC1	4,800 MHz	4,194,304 KB
HOUSBC2	4,800 MHz	4,194,304 KB
LDNLXPRISK1	35,000 MHz	-1 KB
LDNLXPRISK2	5,000 MHz	-1 KB
LDNLXPRISK3	45,000 MHz	-1 KB
LDNLXPRISK4	30,000 MHz	-1 KB

1 - 10 of 18 items < 1 2 >

VM Limits

A **limit** is a way to artificially cap resource usage for a VM without changing the configuration.

For example, a VM configured with 4 vCPUs and 8GB of vRAM could be limited to using no more than half of those resources.

This is extremely helpful in test or dev environments but it can create problems in production if limits are applied without consideration to application performance requirements. **It's better to resize a VM than to apply a limit, in general.**

This list shows up to 10 VMs in your environment that have limits for CPU or memory (an entry of -1 means no limit).

You can [adjust limits using the Actions menu](#) in vRealize Operations.

15. VOA Report Configuration VM Compute Reservations

VM Resource Reservations			
Reservations provide a resource guarantee for VMs. If you have business critical applications, you can provide a reservation for those VMs so that these important applications will not have to compete for resources with less critical applications.			
Sometimes, reservations can be improperly used as containers to help organize VMs (which is more properly done with tagging and folders). This can become a problem because it subdivides resources and creates contention.			
This list shows up to 10 VMs in your SDDC with CPU or memory reservations (a value of 0 means no reservation).			
<p>You can reconfigure resource reservations from the Actions menu in vRealize Operations</p>			
Name	CPU Reservation	Memory Reservation	vCenter
aads-8.0.0.0.268_OV...	6,900 MHz	9,437,184 KB	Idnlxpvcsa1
AAM	0 MHz	8,388,608 KB	Idnlxpvcsa1
ABJLSP	1,950 MHz	3,670,016 KB	Idnlxpvcsa1
ACCLSP	1,950 MHz	32,768 KB	Idnlxpvcsa1
ACCLXPLSP	1,950 MHz	3,670,016 KB	Idnlxpvcsa1
ARGLSP	1,950 MHz	3,670,016 KB	Idnlxpvcsa1
ARGLXPLSP	1,950 MHz	3,670,016 KB	Idnlxpvcsa1
BEJLSP	1,950 MHz	3,670,016 KB	Idnlxpvcsa1
BOGLSP	1,950 MHz	3,670,016 KB	Idnlxpvcsa1
BRZLSP	1,950 MHz	3,670,016 KB	Idnlxpvcsa1

1 - 10 of 127 items

< 1 2 3 4 5 ... 13 >