

Recommended Configuration Maximums

vRealize Operations Manager 8.1
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vmware®

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This Configuration Maximums document provides the recommended configuration limits for VMware products. When you configure, deploy and operate your virtual and physical equipment, it is highly recommended you stay within the limits supported by your product. The limits presented in the tool are tested, recommended limits, and are fully supported by VMware.

Disclaimer: The limits can be affected by other factors, such as hardware dependencies. For more information about the supported hardware, see the appropriate hardware compatibility guide. It might not be possible to maximize all configuration settings and expect your desired outcome. To ensure that you do not exceed supported configurations for your environment, consult individual solution limits. The recommended configuration limits do not represent the theoretical possibilities of your product.

Category		Limit	Description
Extra Small Deployment			
Configuration	vCPU	2	
Configuration	Memory (GB)	8	
Configuration	Datastore latency	10 ms	Consistently lower than 10 ms with possible occasional peaks up to 15 ms
Configuration	Network latency for data nodes	5 ms	
Configuration	Network latency for remote collectors	200 ms	
Configuration	Network latency between agents and vRealize Operations Manager nodes and remote collectors	20 ms	
Configuration	vCPU - Physical core ratio for data nodes	1 vCPU to 1 physical core at scale maximums	It is critical to allocate enough CPU resources for environments running at scale maximums to avoid performance degradation. Refer to the vRealize Operations Manager Cluster Node Best Practices in the vRealize Operations Manager 6.6 Help for more guidelines regarding CPU allocation.
Objects and Metrics	Single-Node Maximum Objects	350	
Objects and Metrics	Single-Node Maximum Collected Metrics	70,000	Metric numbers reflect the total number of metrics that are collected from all adapter instances in vRealize Operations Manager. To get this number, you can go to the Cluster Management page in vRealize Operations Manager, and view the adapter instances of each node at the bottom of the page. You can get the number of metrics collected by each adapter instance. The sum of these metrics is what is estimated in this sheet. Note: The number shown in the overall metrics on the Cluster Management page reflects the metrics that are collected from different data sources and the metrics that vRealize Operations Manager creates.
Objects and Metrics	Maximum number of nodes in a cluster	1	
Objects and Metrics	Maximum Objects for the configuration with the maximum supported number of nodes	350	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Maximum Metrics for the configuration with the maximum supported number of nodes	70,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
End Point Operations agent	Maximum number of End Point Operations Management agents per node	100	
vRealize Application Remote Collector telegraf agent	Maximum number of telegraf agents per node	100	
Small Deployments			

Recommended Configuration Limits

Category		Limit	Description
Configuration	vCPU	4	
Configuration	Memory (GB)	16	
Configuration	Maximum Memory Configuration (GB)	32	
Configuration	Datastore latency	10 ms	Consistently lower than 10 ms with possible occasional peaks up to 15 ms
Configuration	Network latency for data nodes	5 ms	
Configuration	Network latency for remote collectors	200 ms	
Configuration	Network latency between agents and vRealize Operations Manager nodes and remote collectors	20 ms	
Configuration	vCPU - Physical core ratio for data nodes	1 vCPU to 1 physical core at scale maximums	It is critical to allocate enough CPU resources for environments running at scale maximums to avoid performance degradation. Refer to the vRealize Operations Manager Cluster Node Best Practices in the vRealize Operations Manager 6.6 Help for more guidelines regarding CPU allocation.
Objects and Metrics	Single-Node Maximum Objects	5,000	
Objects and Metrics	Single-Node Maximum Collected Metrics	800,000	Metric numbers reflect the total number of metrics that are collected from all adapter instances in vRealize Operations Manager. To get this number, you can go to the Cluster Management page in vRealize Operations Manager, and view the adapter instances of each node at the bottom of the page. You can get the number of metrics collected by each adapter instance. The sum of these metrics is what is estimated in this sheet. Note: The number shown in the overall metrics on the Cluster Management page reflects the metrics that are collected from different data sources and the metrics that vRealize Operations Manager creates.
Objects and Metrics	Multi-Node Maximum Objects Per Node	3,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Multi-Node Maximum Collected Metrics Per Node	700,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Maximum number of nodes in a cluster	2	
Objects and Metrics	Maximum Objects for the configuration with the maximum supported number of nodes	6000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.

Recommended Configuration Limits

Category		Limit	Description
Objects and Metrics	Maximum Metrics for the configuration with the maximum supported number of nodes	1,400,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
End Point Operations agent	Maximum number of End Point Operations Management agents per node	300	
vRealize Application Remote Collector telegraf agent	Maximum number of telegraf agents per node	500	
vRealize Application Remote Collector telegraf agent	vCPU	4	
vRealize Application Remote Collector telegraf agent	Default Memory	8 GB	
vRealize Application Remote Collector telegraf agent	Maximum number of supported telegraf agents	500	
Continuous Availability	Maximum number of nodes in each Continuous Availability fault-domain	1	Each Continuous Availability cluster must have one Witness node which will require 2 vCPUs and 8GB Memory.
Medium Deployments			
Configuration	vCPU	8	
Configuration	Memory (GB)	32	
Configuration	Maximum Memory Configuration (GB)	64	
Configuration	Datastore latency	10 ms	Consistently lower than 10 ms with possible occasional peaks up to 15 ms
Configuration	Network latency for data nodes	5 ms	
Configuration	Network latency for remote collectors	200 ms	
Configuration	Network latency between agents and vRealize Operations Manager nodes and remote collectors	20 ms	
Configuration	vCPU - Physical core ratio for data nodes	1 vCPU to 1 physical core at scale maximums	It is critical to allocate enough CPU resources for environments running at scale maximums to avoid performance degradation. Refer to the vRealize Operations Manager Cluster Node Best Practices in the vRealize Operations Manager 6.6 Help for more guidelines regarding CPU allocation.
Objects and Metrics	Single-Node Maximum Objects	15,000	

Recommended Configuration Limits

Category		Limit	Description
Objects and Metrics	Single-Node Maximum Collected Metrics	2,500,000	Metric numbers reflect the total number of metrics that are collected from all adapter instances in vRealize Operations Manager. To get this number, you can go to the Cluster Management page in vRealize Operations Manager, and view the adapter instances of each node at the bottom of the page. You can get the number of metrics collected by each adapter instance. The sum of these metrics is what is estimated in this sheet. Note: The number shown in the overall metrics on the Cluster Management page reflects the metrics that are collected from different data sources and the metrics that vRealize Operations Manager creates.
Objects and Metrics	Multi-Node Maximum Objects Per Node	8,500	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Multi-Node Maximum Collected Metrics Per Node	2,000,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Maximum number of nodes in a cluster	8	
Objects and Metrics	Maximum Objects for the configuration with the maximum supported number of nodes	68,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Maximum Metrics for the configuration with the maximum supported number of nodes	16,000,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
End Point Operations agent	Maximum number of End Point Operations Management agents per node	1,200	
vRealize Application Remote Collector telegraf agent	Maximum number of telegraf agents per node	1500	
vRealize Application Remote Collector telegraf agent	vCPU	8	
vRealize Application Remote Collector telegraf agent	Default Memory	16 GB	
vRealize Application Remote Collector telegraf agent	Maximum number of supported telegraf agents	3000	
Continuous Availability	Maximum number of nodes in each Continuous Availability fault-domain	4	Each Continuous Availability cluster must have one Witness node which will require 2 vCPUs and 8 GB of Memory.
Large Deployments			
Configuration	vCPU	16	
Configuration	Memory (GB)	48	
Configuration	Maximum Memory Configuration (GB)	96	

Recommended Configuration Limits

Category		Limit	Description
Configuration	Datastore latency	10 ms	Consistently lower than 10 ms with possible occasional peaks up to 15 ms
Configuration	Network latency for data nodes	5 ms	
Configuration	Network latency for remote collectors	200 ms	
Configuration	Network latency between agents and vRealize Operations Manager nodes and remote collectors	20 ms	
Configuration	vCPU - Physical core ratio for data nodes	1 vCPU to 1 physical core at scale maximums	It is critical to allocate enough CPU resources for environments running at scale maximums to avoid performance degradation. Refer to the vRealize Operations Manager Cluster Node Best Practices in the vRealize Operations Manager 6.6 Help for more guidelines regarding CPU allocation.
Objects and Metrics	Single-Node Maximum Objects	20,000	
Objects and Metrics	Single-Node Maximum Collected Metrics	4,000,000	Metric numbers reflect the total number of metrics that are collected from all adapter instances in vRealize Operations Manager. To get this number, you can go to the Cluster Management page in vRealize Operations Manager, and view the adapter instances of each node at the bottom of the page. You can get the number of metrics collected by each adapter instance. The sum of these metrics is what is estimated in this sheet. Note: The number shown in the overall metrics on the Cluster Management page reflects the metrics that are collected from different data sources and the metrics that vRealize Operations Manager creates.
Objects and Metrics	Multi-Node Maximum Objects Per Node	16,500	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Multi-Node Maximum Collected Metrics Per Node	3,000,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Maximum number of nodes in a cluster	16	
Objects and Metrics	Maximum Objects for the configuration with the maximum supported number of nodes	200,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Maximum Metrics for the configuration with the maximum supported number of nodes	37,500,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
End Point Operations agent	Maximum number of End Point Operations Management agents per node	2,500	

Recommended Configuration Limits

Category		Limit	Description
vRealize Application Remote Collector telegraf agent	Maximum number of telegraf agents per node	3000	
vRealize Application Remote Collector telegraf agent	vCPU	16	
vRealize Application Remote Collector telegraf agent	Default Memory	24 GB	
vRealize Application Remote Collector telegraf agent	Maximum number of supported telegraf agents	6000	
Continuous Availability	Maximum number of nodes in each Continuous Availability fault-domain	8	Each Continuous Availability cluster must have one Witness node which will require 2 vCPUs and 8 GB of Memory.
Extra Large Deployments			
Configuration	vCPU	24	
Configuration	Memory (GB)	128	
Configuration	Datastore latency	10 ms	Consistently lower than 10 ms with possible occasional peaks up to 15 ms
Configuration	Network latency for data nodes	5 ms	
Configuration	Network latency for remote collectors	200 ms	
Configuration	Network latency between agents and vRealize Operations Manager nodes and remote collectors	20 ms	
Configuration	vCPU - Physical core ratio for data nodes	1 vCPU to 1 physical core at scale maximums	It is critical to allocate enough CPU resources for environments running at scale maximums to avoid performance degradation. Refer to the vRealize Operations Manager Cluster Node Best Practices in the vRealize Operations Manager 6.6 Help for more guidelines regarding CPU allocation.
Objects and Metrics	Single-Node Maximum Objects	45,000	
Objects and Metrics	Single-Node Maximum Collected Metrics	10,000,000	Metric numbers reflect the total number of metrics that are collected from all adapter instances in vRealize Operations Manager. To get this number, you can go to the Cluster Management page in vRealize Operations Manager, and view the adapter instances of each node at the bottom of the page. You can get the number of metrics collected by each adapter instance. The sum of these metrics is what is estimated in this sheet. Note: The number shown in the overall metrics on the Cluster Management page reflects the metrics that are collected from different data sources and the metrics that vRealize Operations Manager creates.
Objects and Metrics	Multi-Node Maximum Objects Per Node	40,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.

Recommended Configuration Limits

Category		Limit	Description
Objects and Metrics	Multi-Node Maximum Collected Metrics Per Node	7,500,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Maximum number of nodes in a cluster	8	
Objects and Metrics	Maximum Objects for the configuration with the maximum supported number of nodes	240,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
Objects and Metrics	Maximum Metrics for the configuration with the maximum supported number of nodes	45,000,000	In large, 16-node configurations, note the reduction in maximum metrics to permit some head room. This adjustment is accounted for in the calculations.
End Point Operations agent	Maximum number of End Point Operations Management agents per node	2,500	
vRealize Application Remote Collector telegraf agent	Maximum number of telegraf agents per node	4000	
Continuous Availability	Maximum number of nodes in each Continuous Availability fault-domain	5	Each Continuous Availability cluster must have one Witness node which will require 2 vCPUs and 8 GB of Memory.
Standard Deployment with Remote Collector			
Configuration	vCPU	2	
Configuration	Memory (GB)	4	
Configuration	Maximum Memory Configuration (GB)	8	
Configuration	Datastore latency	10 ms	Consistently lower than 10 ms with possible occasional peaks up to 15 ms
Configuration	Network latency for data nodes	5 ms	
Configuration	Network latency for remote collectors	200 ms	
Configuration	Network latency between agents and vRealize Operations Manager nodes and remote collectors	20 ms	
Configuration	vCPU - Physical core ratio for data nodes	1 vCPU to 1 physical core at scale maximums	It is critical to allocate enough CPU resources for environments running at scale maximums to avoid performance degradation. Refer to the vRealize Operations Manager Cluster Node Best Practices in the vRealize Operations Manager 6.6 Help for more guidelines regarding CPU allocation.
Objects and Metrics	Single-Node Maximum Objects	6,000	The object limit for the remote collector is based on the VMware vCenter adapter.

Category		Limit	Description
Objects and Metrics	Single-Node Maximum Collected Metrics	1,200,000	Metric numbers reflect the total number of metrics that are collected from all adapter instances in vRealize Operations Manager. To get this number, you can go to the Cluster Management page in vRealize Operations Manager, and view the adapter instances of each node at the bottom of the page. You can get the number of metrics collected by each adapter instance. The sum of these metrics is what is estimated in this sheet. Note: The number shown in the overall metrics on the Cluster Management page reflects the metrics that are collected from different data sources and the metrics that vRealize Operations Manager creates.
Objects and Metrics	Maximum number of nodes in a cluster	60	
End Point Operations agent	Maximum number of End Point Operations Management agents per node	250	
vRealize Application Remote Collector telegraf agent	Maximum number of telegraf agents per node	250	
Large Deployments with Remote Collector			
Other Maximum			