

HCIBench Report

Test Case Name: fio-8vmdk-100ws-256k-0rdpct-0randompct-1threads-1692023257

Report Date: 2023-08-14 16:05:08 +0000

Generated by: [HCIBench 2.8.2](#)

Performance Results

Datstore: vsanDatastore

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JOB_NAME: job0

Number of VMs: 6

I/O per Second: 3606.20 IO/S

Throughput: 901.00 MB/s

Read Latency: 0.00 ms

Write Latency: 13.30 ms

95th Percentile Read Latency: 0.00 ms

95th Percentile Write Latency: 14.00 ms

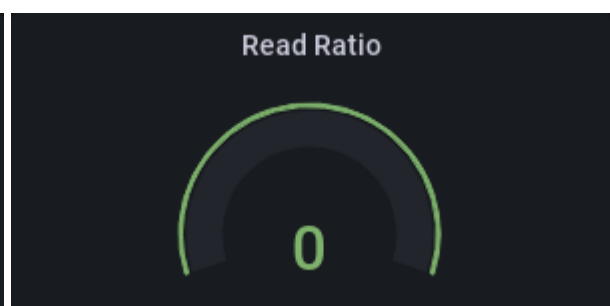
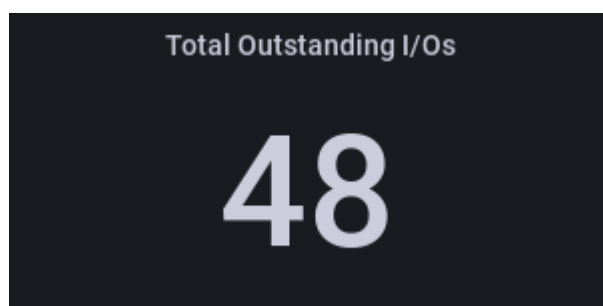
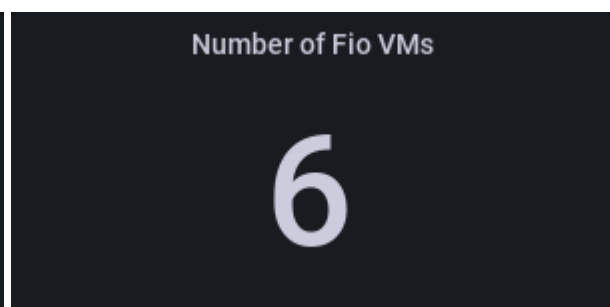
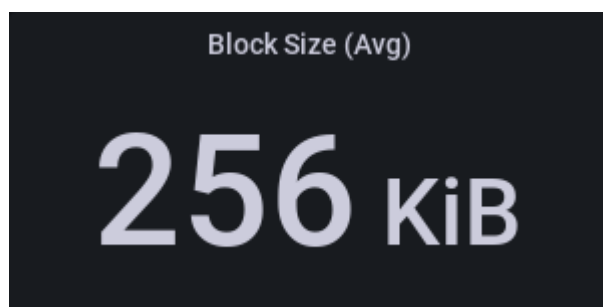
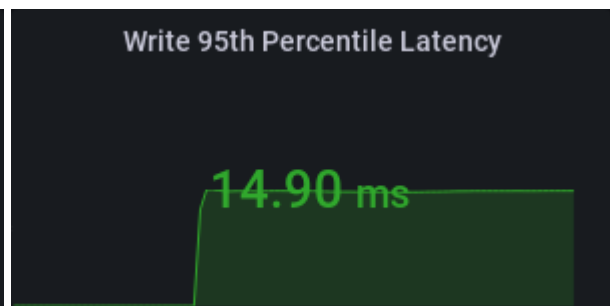
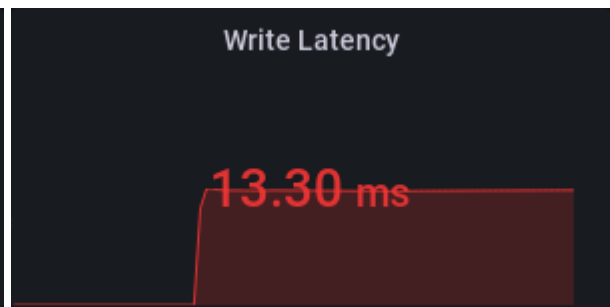
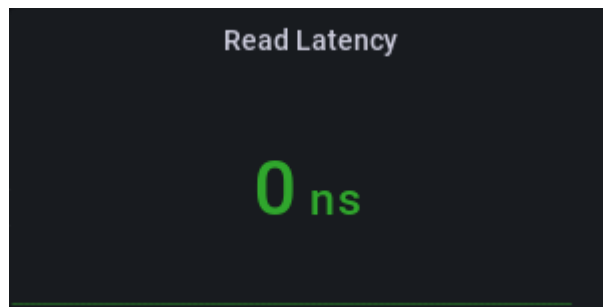
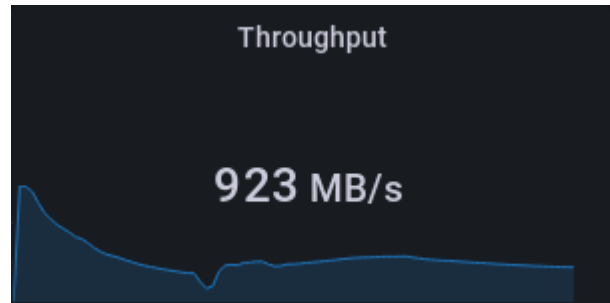
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Resource Usage

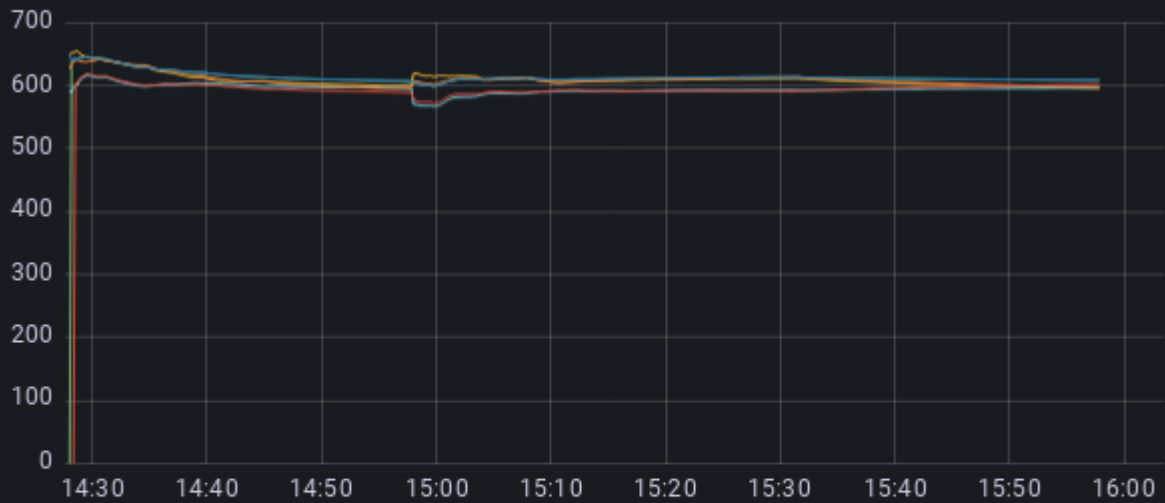
Cluster	cpu.usage	cpu.utilization	mem.usage
EE-Cluster	13.62%	31.77%	22.28%

Performance Charts

HCIBench



Fio IOPS



	min	max	avg	current
hci-fio-datastore-6001-0-1	0	645.13	611.73	
hci-fio-datastore-6001-0-2	595.46	654.73	608.68	
hci-fio-datastore-6001-0-3	566.53	615.88	593.82	
hci-fio-datastore-6001-1-1	594.81	640.87	608.68	

Fio Throughput



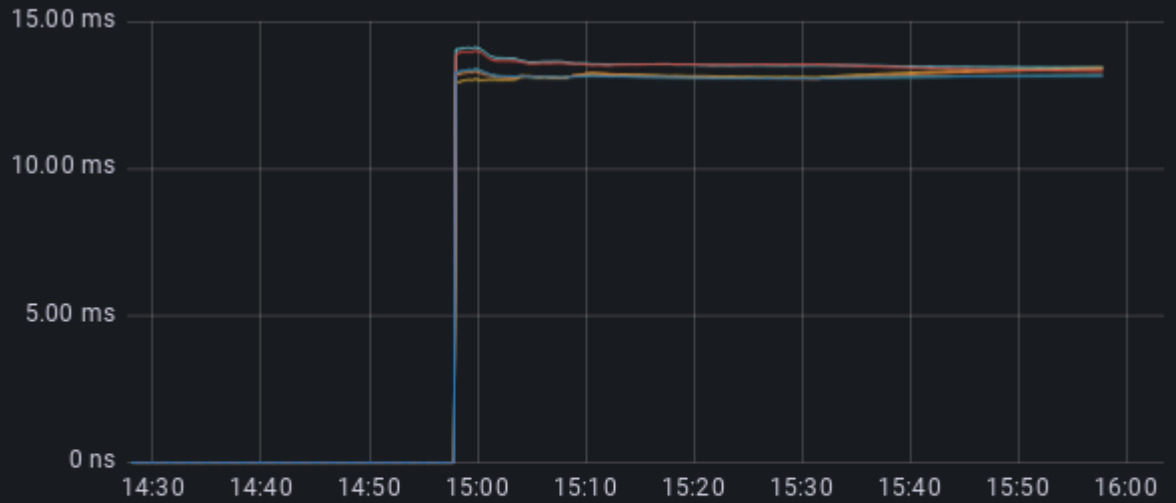
	min	max	avg	current
hci-fio-datastore-6001-0-1	153 MB/s	165 MB/s	157 MB/s	
hci-fio-datastore-6001-0-2	152 MB/s	168 MB/s	156 MB/s	
hci-fio-datastore-6001-0-3	145 MB/s	158 MB/s	152 MB/s	
hci-fio-datastore-6001-1-1	152 MB/s	164 MB/s	156 MB/s	

Fio Read Latency



	min	max	avg	current
hci-fio-datastore-6001-0-1	0 ns	0 ns	0 ns	
hci-fio-datastore-6001-0-2	0 ns	0 ns	0 ns	
hci-fio-datastore-6001-0-3	0 ns	0 ns	0 ns	
hci-fio-datastore-6001-1-1	0 ns	0 ns	0 ns	

Fio Write Latency



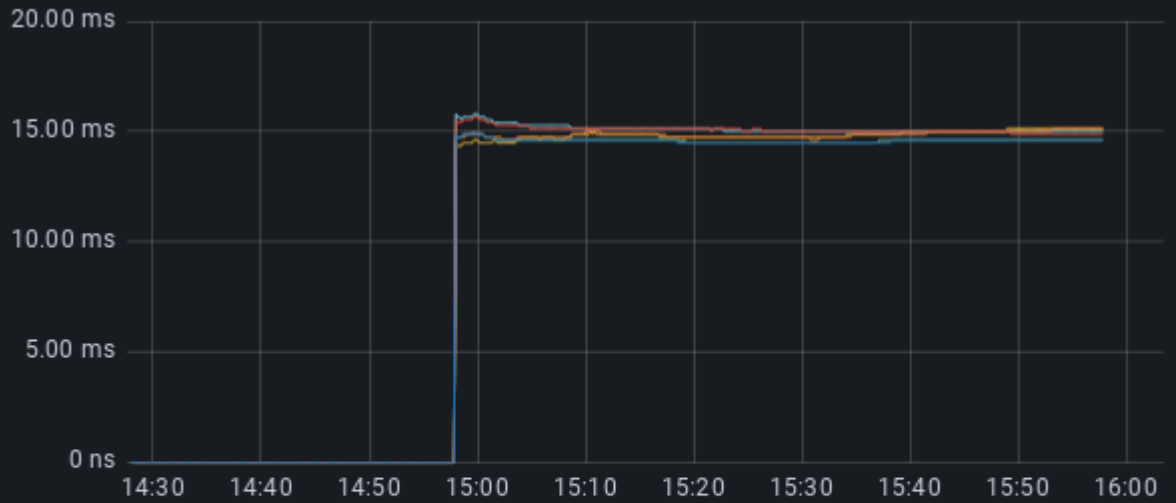
	min	max	avg	current
hci-fio-datastore-6001-0-1	0 ns	13 ms	9 ms	
hci-fio-datastore-6001-0-2	0 ns	13 ms	9 ms	
hci-fio-datastore-6001-0-3	0 ns	14 ms	9 ms	
hci-fio-datastore-6001-1-1	0 ns	13 ms	9 ms	

Read 95th Percentile Latency

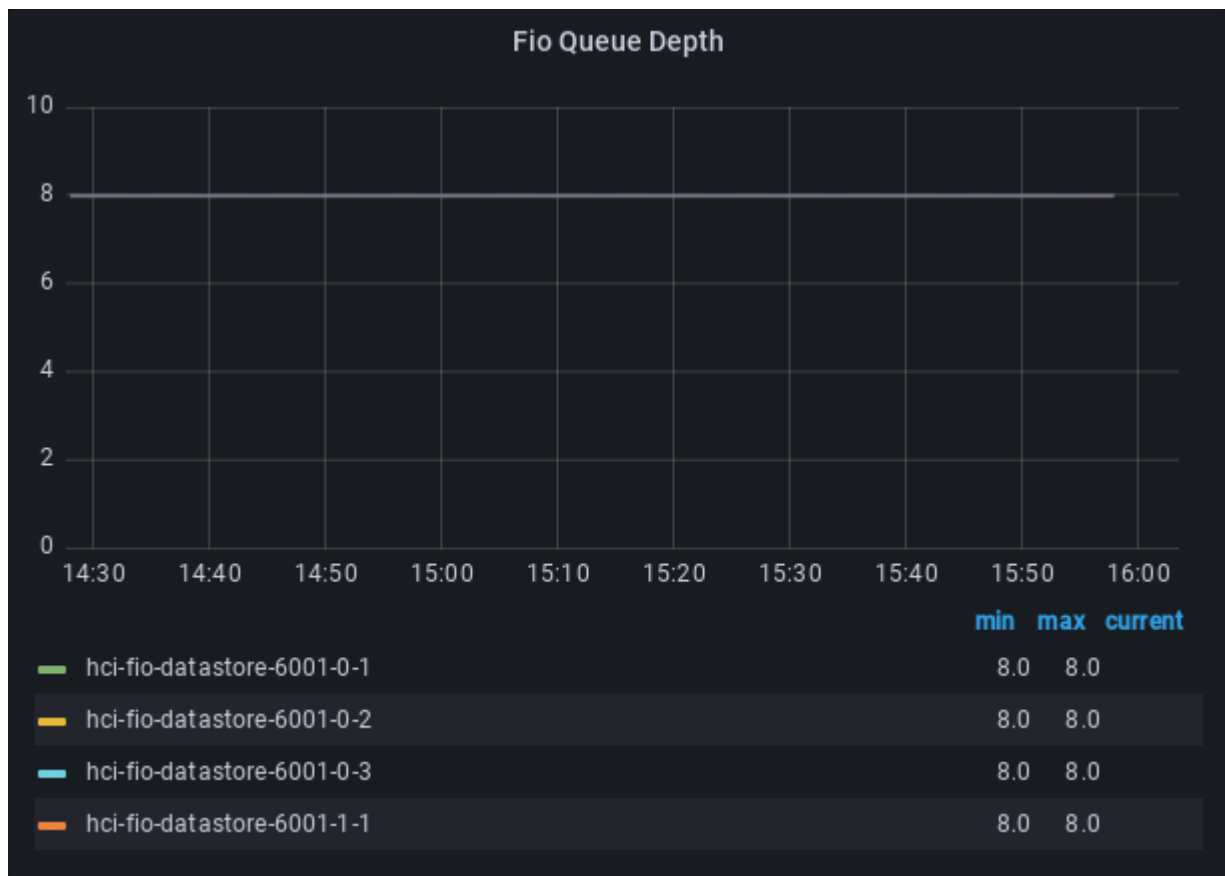


	min	max	current
hci-fio-datastore-6001-0-1	0 ns	0 ns	
hci-fio-datastore-6001-0-2	0 ns	0 ns	
hci-fio-datastore-6001-0-3	0 ns	0 ns	
hci-fio-datastore-6001-1-1	0 ns	0 ns	

Write 95th Percentile Latency



	min	max	current
hci-fio-datastore-6001-0-1	0 ns	15.008 ms	
hci-fio-datastore-6001-0-2	0 ns	15.139 ms	
hci-fio-datastore-6001-0-3	0 ns	15.794 ms	
hci-fio-datastore-6001-1-1	0 ns	15.139 ms	



Dashboards Links

[Fio Benchmark Dashboard in Grafana](#)

[vSAN Performance Stats in Grafana](#)

[vSAN Observer Dashboard](#)

[vSAN Overview Dashboard in Grafana](#)

HCIBench Configurations

Delete Guest VMs after Testing: false
Multi-Write VMDK: false
Size of Data Disk in GB: 4
Virtual Disk Preparation Method: ZERO
Datastore Name: vsanDatastore
Clear Read/Write Cache/Buffer Before Test: true
Use Internal Static IP: false
Number of vCPU per VM: 4
Number of Data Disk per VM: 8
Storage Policy Name: Datastore Default Policy
Directly Deploy on Hosts: false
vSAN Debug Mode: true
Workload Parameter File Source: /opt/tmp/tmp1692022216
Datacenter Name: EE Training Datacenter
Size(GB) of RAM per VM: 8
Cluster Name: EE-Cluster
Reuse Existing VMs: false
Network Name: VM Network
Easy Run: true
Easy Run Workloads: 256k0r
vCenter IP/Hostname: vcenter7.cyrus-consultants.co.uk
Tool to Use: fio
Guest VM Name Prefix: hci-fio
Test Name: easy-run-1692022216
Number of Guest VMs: 6
VM Folder Name: HCI-Bench-Test-Folder

vSAN Configurations

Local vSAN Datastore Name: vsanDatastore
vSAN ESA Enabled: False
vSAN Type: All-Flash
Number of Hosts: 3
Disk Groups per Host: 1
Total Cache Disk Size: 1047 GB
Capacity Disk per Disk Group: 2
Space Efficiency: None
Data At-Rest Encryption: false
Data In-Transit Encryption: false
Fault Tolerance Preference: RAID-1(Mirroring)-Performance
Host Primary Fault Tolerance: 1
Host Secondary Fault Tolerance: 0
Checksum Disabled: False

Capacity: 2445 GB
Freespace: 1146 GB
Local: 'True'

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Cluster Hosts Map

EE-Cluster:
- esxi009.cyrus-consultants.co.uk
- esxi011.cyrus-consultants.co.uk
- esxi007.cyrus-consultants.co.uk

Benchmark Tool Configurations

```
; Auto generated FIO parameter file
; block_size: 256k
; testing_time: 3600
; warmup_time: 1800
; nb_disks: 8
; io_rate: None
; read_pct: 0
; random_pct: 0
; working_set: 100
; nb_threads: 1
```

```
[global]
runtime=3600
time_based=1
ramp_time=1800
direct=1
buffered=0
fsync=0
readwrite=write
random_generator=tausworthe64
blocksize=256K
ioengine=libaio
group_reporting
lat_percentiles=1
continue_on_error=all
```

```
[[job0]
filename=/dev/sda
size=100%
iodepth=1
```

```
[[job1]
filename=/dev/sdb
size=100%
iodepth=1
```

```
[[job2]
filename=/dev/sdc
size=100%
iodepth=1
```

```
[[job3]
filename=/dev/sdd
size=100%
iodepth=1
```

```
[[job4]
filename=/dev/sde
```

size=100%
iodepth=1

[job5]
filename=/dev/sdf
size=100%
iodepth=1

[job6]
filename=/dev/sdg
size=100%
iodepth=1

[job7]
filename=/dev/sdh
size=100%
iodepth=1