VigorACS 3 Server Hardware Suggestion for 50+ Nodes

No. of Nodes	Suggested OS	Suggested CPU	Suggested Memory Size	Storage*
50	Windows/ Linux (OS bit: 64)	Intel Core i3-10105F Processor 6M Cache, 3.70 GHz, Cores: 4, Threads: 8 AMD Ryzen 3 7320U Processor 4M Cache, 2.4 GHz , Cores: 4, Threads: 8	8GB (DDR4/DDR5)	1T
500	Windows/ Linux (OS bit: 64)	Intel Core i5-11320H Processor 8M Cache, 3.2 GHz, Cores: 4, Threads: 8 AMD Ryzen 3 3300X Processor 16M Cache, 3.8 GHz, Cores: 4, Threads: 8	16GB (DDR4/DDR5)	2T
5,000	Linux (OS bit: 64)	Intel Core i7-11600H Processor 12M Cache, 2.9 GHz, Cores: 6, Threads: 12 Intel Xeon Gold 6128 Processor 16.5M Cache, 3.80 GHz, Cores: 6, Threads: 12 AMD Ryzen 5 5600X Processor 32M Cache, 3.7 GHz, Cores: 6, Threads: 12	20GB (DDR4/DDR5)	6T
10,000	Linux (OS bit: 64)	Intel Core i9-11980HK Processor 24M Cache, 3.30 GHz, Cores: 8, Threads: 16 Intel Xeon Gold 6334 Processor 18M Cache, 3.60 GHz, Cores: 8, Threads: 16 AMD EPYC 72F3 Processor 256M Cache, 3.7 GHz, Cores: 8, Threads: 16 AMD Ryzen 7 5800X Processor 32M Cache, 3.8 GHz, Cores: 8, Threads: 16	32GB (DDR4/DDR5)	12T

No. of Nodes	Suggested OS	Suggested CPU	Suggested Memory Size	Storage*
20,000	Linux (OS bit: 64)	Intel Core i9-12900K Processor 30M Cache, 3.2 GHz , Cores: 16, Threads: 32 Intel Xeon Gold 6346 Processor 36M Cache, 3.10 GHz , Cores: 16, Threads: 32 AMD EPYC 73F3 Processor 256M Cache, 3.5 GHz, Cores: 16, Threads: 32 AMD Ryzen 9 5950X Processor 64M Cache, 3.4 GHz, Cores: 16, Threads: 32	64GB (DDR4/DDR5)	18T
30,000	Linux (OS bit: 64)	Intel(R) Xeon(R) Platinum 8360H Processor 33M Cache, 3.00 GHz , Cores: 24, Threads: 48 AMD EPYC 74F3 Processor 256M Cache, 3.2 GHz, Cores: 24, Threads: 48	96GB (DDR4/DDR5)	24T
40,000	Linux (OS bit: 64)	Intel(R) Xeon(R) Platinum 8380H Processor 38.5M Cache, 2.90 GHz , Cores: 28, Threads: 56 AMD EPYC 75F3 Processor 256M Cache, 2.95 GHz, Cores: 32, Threads: 64	160GB (DDR4/DDR5)	40T
50,000	Linux (OS bit: 64)	Intel Xeon Platinum 9282 Processor 77M Cache, 2.60 GHz , Cores: 56, Threads: 112 AMD EPYC 7763 Processor 256M Cache, 2.4 GHz, Cores: 64, Threads: 128	200GB (DDR4/DDR5)	70T
60,000	Linux (OS bit: 64)	AMD EPYC 9654 Processor 384M Cache, 2.4 GHz, Cores: 96, Threads: 192	240GB (DDR4/DDR5)	100T

*Storage : SSD Recommended, read 7000MB/s, write 7000MB/s

Estimating VigorACS Storage Requirement:

The requirement of storage can be calculated by the number of nodes and the features in use.

- Influx DB data for device info (required): 300 MB per node
- DB data : about 3 MB per node, per day
- Syslog (optional): about 48 MB per node, per day
- CFG backup for Vigor2960 or Vigor3900 (optional): about 300 KB per node
- CFG backup for DrayOS Routers (optional): about 50 KB per node.

For example, managing 500 DrayOS Routers with Syslog and CFG Backup daily for 1 month, the required storage size will be:

1. Influx DB data: 300 MB x 500 nodes= 10 GB
2. DB data: 3 MB x 30 days x 500 nodes= 45 GB
3. Syslog: 48 MB x 30 days x 500 nodes = 720 GB
4. CFG Backup: 50 KB x 30 days x 500 nodes = 750 MB
   → Total storage required: 150 + 45 + 720 + 0.75 = **915.75 GB**