

VigorACS 3 Server Hardware Suggestion

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)	10GB(DDR4/DDR5)	200GB
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)	300GB
5000	Linux (OS bit: 64)	Intel Core i7-11600H Processor (12M Cache, 2.9 GHz, Cores: 6, Threads: 12) AMD Ryzen 5 5600X Processor (32M Cache, 3.7 GHz, Cores: 6, Threads: 12)	20GB(DDR4/DDR5)	500GB
10000	Linux (OS bit: 64)	Intel Core i9-11980HK Processor (24M Cache, 3.30 GHz, Cores: 8, Threads: 16) AMD Ryzen 7 5800X Processor (32M Cache, 3.8 GHz, Cores: 8, Threads: 16)	32GB(DDR4/DDR5)	800GB
20000	Linux (OS bit: 64)	Intel Core i9-12900K Processor (30M Cache, 3.2 GHz , Cores: 16, Threads: 32) AMD Ryzen 9 5950X Processor (64M Cache, 3.4 GHz, Cores: 16, Threads: 32)	64GB(DDR4/DDR5)	1TB
30000	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)	1.5TB

No. of Nodes	Suggested OS	Suggested CPU	Suggested Memory Size	Storage*
40000	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)	2TB
50000	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)	3TB
60000	Linux (OS bit: 64)	AMD EPYC 9654 Processor (384M Cache, 2.4 GHz, Cores: 96, Threads: 192)	240GB(DDR4/DDR5)	4TB

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

Estimating VigorACS3 Storage Requirement

MariaDB (CPE's log, CPE's client info, System log)

- About 5KB~3MB. (per node)

InfluxDB (LAN/WAN traffic graph)

- VigorSwitch: about ~2MB.
- VigorAP: about ~3MB.
- VigorRouter: about 2~5MB. (dynamic WAN model: ~10MB)

EMS (firmware file, CFG backups)

- Firmware file: about 10~300MB
- CFG backup: about 50~300KB

For example, managing 1K nodes without keeping the backup and firmware file, advanced features for 1 year, the required storage size will be:

- (maximum) $1000 \text{ (nodes)} \times 3 \text{ MB} \times 365 \text{ (per day)} + 1000 \text{ (nodes)} \times 5 \text{ MB} = 1074 \text{ GB}$
- (minimum) $1000 \text{ (nodes)} \times 5 \text{ KB} \times 365 \text{ (per day)} + 1000 \text{ (nodes)} \times 5 \text{ MB} = 6782 \text{ MB} (\approx 7 \text{ GB})$

Note: The data above is for reference only. Actual storage usage may increase or decrease based on the user's operational behavior.