Notes on sizing and monitoring the performance of Libraesva ESG

HOW MANY CPUs?

It really depends on what CPUs you are using, there are huge differences among different CPUs. The performance of a CPU released three years ago it drastically different than a recent CPU. So, monitor the load and increase the CPUs accordingly.
Please note that increasing CPUs may not provide much more computing power if the hypervisor is overloaded. If your VM has 2 CPUs, the hypervisor waits for 2 cores to have a free clock cycle in order to assign it to the VM. With 4 CPUs assigned to the VM the hypervisor has to wait for 4 cores to have a spare CPU cycle and if the machine is overloaded it may wait longer before a clock cycle can be assigned to the VM. So, increasing CPUs works fine unless the hypervisor is overloaded.

THE MEMORY IS ALWAYS FULL!

The OS tries to use all the available memory and uses all the spare memory for caches and buffers, so it is normal to have always the memory usage close to 100%. You should remove the memory assigned to cache and buffers from the total amount of memory in use.
More easily, you can just have a look at the swap usage: if it's heavily used then the memory is not sufficient or you have configured too many mailscanning processes. If the swap usage is low (20-25%) then it's fine.

DISK PERFORMANCE

The number of processed messages per time unit is is also affected by disk speed. If you log into the console with the admin user, you can execute a disk speed test to check if it's fast enough.

MONITORING THE PERFORMANCE

All the standard linux SNMP OIDs are available, plus the esva spcific OIDs.
To keep an eye on the perfomance, you can monitor the following parameters:

- load avg 15m (1.3.6.1.4.1.2021.10.1.3.3)
- free swap space (1.3.6.1.4.1.2021.4.4.0) over total swap space (1.3.6.1.2.1.25.2.3.1.5.37)
- incoming mail queues (1.3.6.1.4.1.41091.1.1.8.0).

These are the important ones for performance monitoring.

The outgoing queues (1.3.6.1.4.1.41091.1.1.9.0) grow only in case of problems on your mail server, it is not affected by ESVA performance.

MONITORING VIA ZABBIX

A Zabbix template is available, you can download it here