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2 Equipment prerequisites

> ⚠️ Do not install the module on the same server with the DPI platform!

Minimum requirements

For the subsystem, you can use hardware or virtual machines with the characteristics listed below:

1. Processor (CPU) 2.5 ГГц - 1 pce
2. RAM - at least 16 GB
3. Hard disk drive (SSD is highly desirable) - at least 500 GB
4. Operating system - CentOS 7+ or CentOS 8+
5. Network interface (NIC) - at least 1 Gbps

> ⚠️ Capacity space for QoE and Hardware example

Processor

SSE 4.2 instruction set support is required.

Choose processors with a large number of cores. Clock frequency is less important. For example, 16 cores with 2,600 MHz are better than 8 cores at 3,600 MHz.

> ⚠️ Do not disable Hyper-threading and Turbo-Boost.

RAM

RAM should be no less than the amount of data requested.

The more RAM server has, the better performance will be achieved when building reports.

The more memory, the less disk system is stressing.

Minimum prerequisites is 16 GB.

Always disable the swap file.

Disk

Required disk space is at least 16 GB for every storage day, it's actual value depends on daily traffic.

It is estimated that 10 Gbit/s of average daily traffic generates approximately 25 GB of data per hour in the QoE Store.

If your budget makes you possible to use SSD, use it. Otherwise use HDD. SATA HDDs 7200 RPM will be suitable.

When using HDD, you can combine them into RAID-10, RAID-5, RAID-6 or RAID-50.

Most of the data is stored in the `/var/lib/clickhouse/` directory. You can mount a drive/partition on this directory.

Temporary data (ipfix dumps) is stored in the `/var/qoestor/backend/dump/` directory. 50 GB be sufficient for this.

For best performance, it is important (recommended) that these directories are on a separate disk or array. See Disk space settings

Maintenance advice from Yandex ClickHouse

You could familiarize yourself with the contents of maintenance advice from Yandex ClickHouse by following the https://clickhouse.yandex/docs/ru/operations/tips/ link.