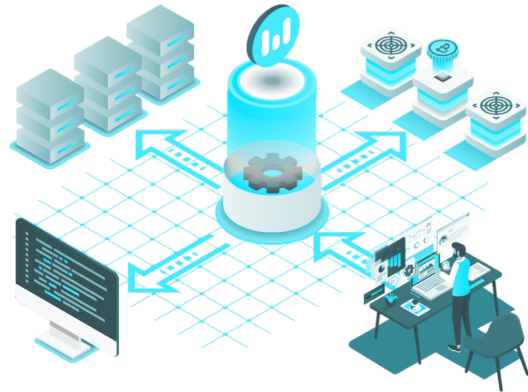


# MEGAMIND

Global Computing Environment

MEGAMIND creates distributed clusters for high performance computing (HPC) in all areas of economic activity.



**Our technology combines independent processing hardware (including mining farms) into a single elastic cloud - distributed universal computing environment (a decentralized analogue of a supercomputer).**

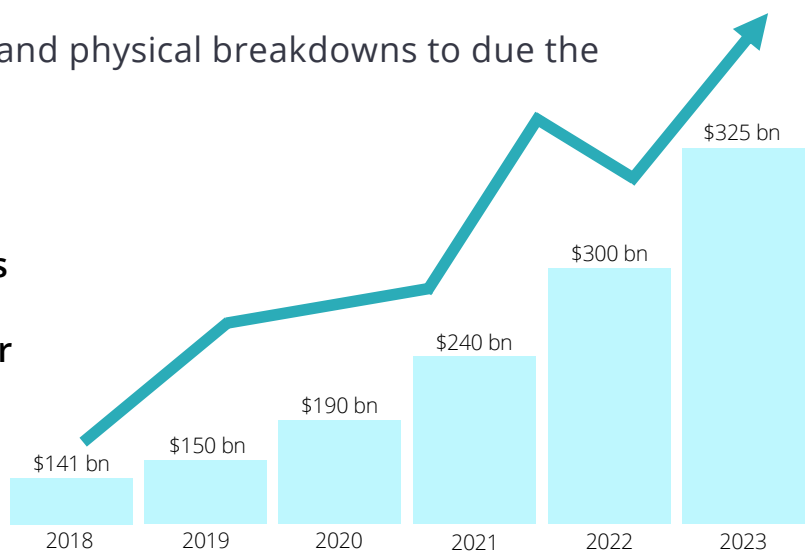
**Customers get results faster and pay less than traditional data centers and cloud solutions, due to:**

- ✓ More efficient data processing;
- ✓ Lack of expensive data centers' hardware;
- ✓ Challenging monopoly of big cloud services corporations.

## **Additional advantages:**

- ✓ we can multiply our computing capacities in no time and without capital expenditures;
- ✓ we are resistant to peak loads and physical breakdowns due to the nature of distributed networks.

**The cloud computing market has reached \$ 150 billion and will continue to grow at 20% per year over the next 5-10 years**



## Our Services

We are ready to provide computing power for technology projects and organizations that need to perform high performance computing.

Typical tasks that our service can most effectively solve:

- training and hosting of machine vision models for surveillance systems;
- construction of 3D models (buildings, city maps, etc.) based on UAV data;
- 3D graphics render;
- seismic data processing for Oil&Gas;
- big data analysis in sales, production, financial sector;
- as well as other tasks that can be parallelized.

**We can develop computing software for a customer "from scratch", or adapt the customer's ready-made software for hosting on Megamind platform.**

## IT security

We understand that the data used in HPC may be a commercial or state secret. That is why we developed our software to be reliable and secure:

- ✓ all data in clusters is stored in isolated encrypted containers;
- ✓ encryption of data transmission / reception is applied at the communication protocol level;
- ✓ a computing cluster based on MEGAMIND technology can be deployed on hardware that will not be connected to the Internet at all – it can be hosted on-premises;
- ✓ to solve problems that should not leave a region or country, MEGAMIND can use cluster sharding technology: thus, Russian data will be located exclusively on hardware located in Russia;
- ✓ MEGAMIND's own data center ensures uninterrupted operation of the entire computing cluster. In case of shutdown / malfunction of other hardware, our own data center will solve the problem on time.

## Proof of Concept

The Megamind team conducted a series of benchmarking tests on rented AWS servers and on their own hardware with Megamind software installed.

Based on the test results, it was found that **Megamind is several times more cost-efficient than cloud solutions:**

Application	Cloud solutions (AWS) price	Computing costs in MEGAMIND
Machine learning	\$6 / hour	\$1 / hour
ETH Mining	\$8 / 100 Mhash	\$1 / 100 Mhash

### Technology stack

In development, we relied on modern sustainable solutions. Combined with our proprietary solutions, these technologies provide an easy migration of a wide range of existing software to our platform.

The solution is based on: the kernel of the Ubuntu 18.04 LTS OS, Docker 19.03, Docker Swarm, Docker Registry v2, Nvidia Docker v2, SSH-based container access, Apache2 to implement the REST API.

### Legal info

The main legal entity of MEGAMIND - Megaminer GmbH (CHE-154.455.371, 26 Sumpfstrasse, 6312 Steinhausen, ZG, Switzerland) takes over the issues of interaction with corporate clients, acting as a single counterparty for b2b contracts. A client enters into a development and/or maintenance contract with this company or with a company from the MEGAMIND group located in Russia.

The presence of the company in a jurisdiction convenient for the client ensures full legality and transparency of our business.

All data centers connected to the network undergo a verification procedure, and contracts are concluded with them.

These measures are necessary in order to ensure the security of the data used in HPC: we always know where and who owns the hardware that has become part of a single computer network.