

Jedox OLAP Accelerator (GPU)

Improved data processing

Jedox GPU is a technology that was developed in cooperation with researchers from the University of Freiburg and the University of Western Australia, co-funded by the German Research Foundation (DFG) and Jedox. The technology uses Nvidia GPU hardware to speed up large data processing jobs.



What does Jedox GPU do?

Jedox In addition to the CPU of the server, Jedox GPU uses the tremendous computing capacity of Nvidia graphics cards (GPUs) to speed up large OLAP aggregations. Modern GPUs come with hundreds of so-called streaming processors and with several GB of graphics memory that allows us to store cube data directly on the GPU.

How does it work?

The way of parallel computation used in Jedox GPU can be explained using the simple example of newspaper delivery.

A delivery van can only deliver to one house at a time. Consequently, it will try to find a possibly short route passing all subscribers and then deliver to one household after the other.

The alternative of paper boys represents the GPU (graphic card): A couple of paper boys (representing the thousands of threads running on a GPU) are more efficient, as there are so many of them. Each one simply goes to a house, checks if a subscriber lives there and if yes, delivers a paper. This way, newspaper delivery can be achieved much faster.



Jedox GPU for your business

For best performance of Jedox GPU Jedox recommends Nvidia Tesla C2050, C2060, and S1070 GPUs, which come in workstations and servers.