HPS

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# WEKA Filesystem

A brief introduction

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# What is WEKA FS

- A commercial platform solution for IO operations focussed on SSD/NVMe
- giga → tera → peta → exa → zetta → yotta → xona → WEKA → vunda
- Consists of a server/client system
  - Server: Holds the WEKA Cluster Software and Disks
  - Client: Mounts the Cluster FS with the help of a Frontend Client
- Uses it's own IO Stack, bypassing Kernel, direct POSIX access
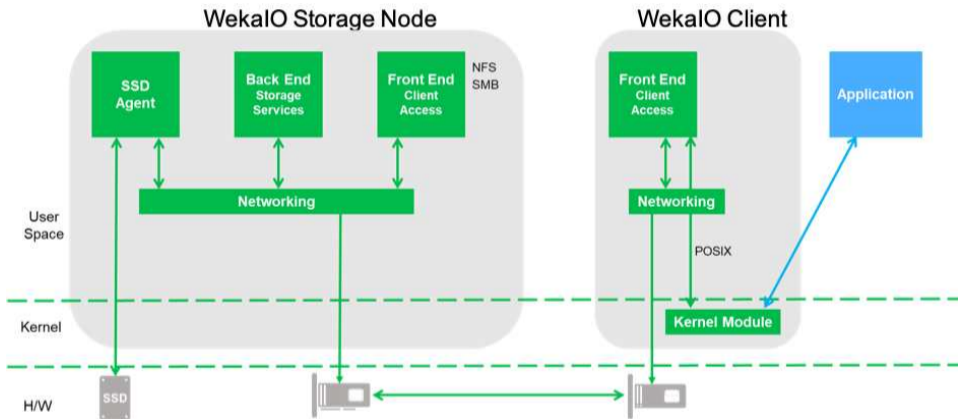- Has interfaces for NFS, SMB and S3 access

## Schematics



Image source: https://weka.io

# Pros/Cons

- ■ Pros
  - ▶ No extra Hardware Storage needed
  - ▶ Extremely high IO performance
  - ▶ Highly scalable
- ■ Cons
  - ▶ Commercial Software
  - ▶ Licensing costs
  - ▶ Problems with Infiniband in Version 4

## Live Presentation of Deployment

■ Now we will deploy a WEKA installation from scratch on 8 Compute Nodes with 2 NVMe Drives per Node and a short Benchmark run.

## Plenar discussion

- What problems could occur with our Installation?
- How could we possibly fix these problems?
- Other questions?