

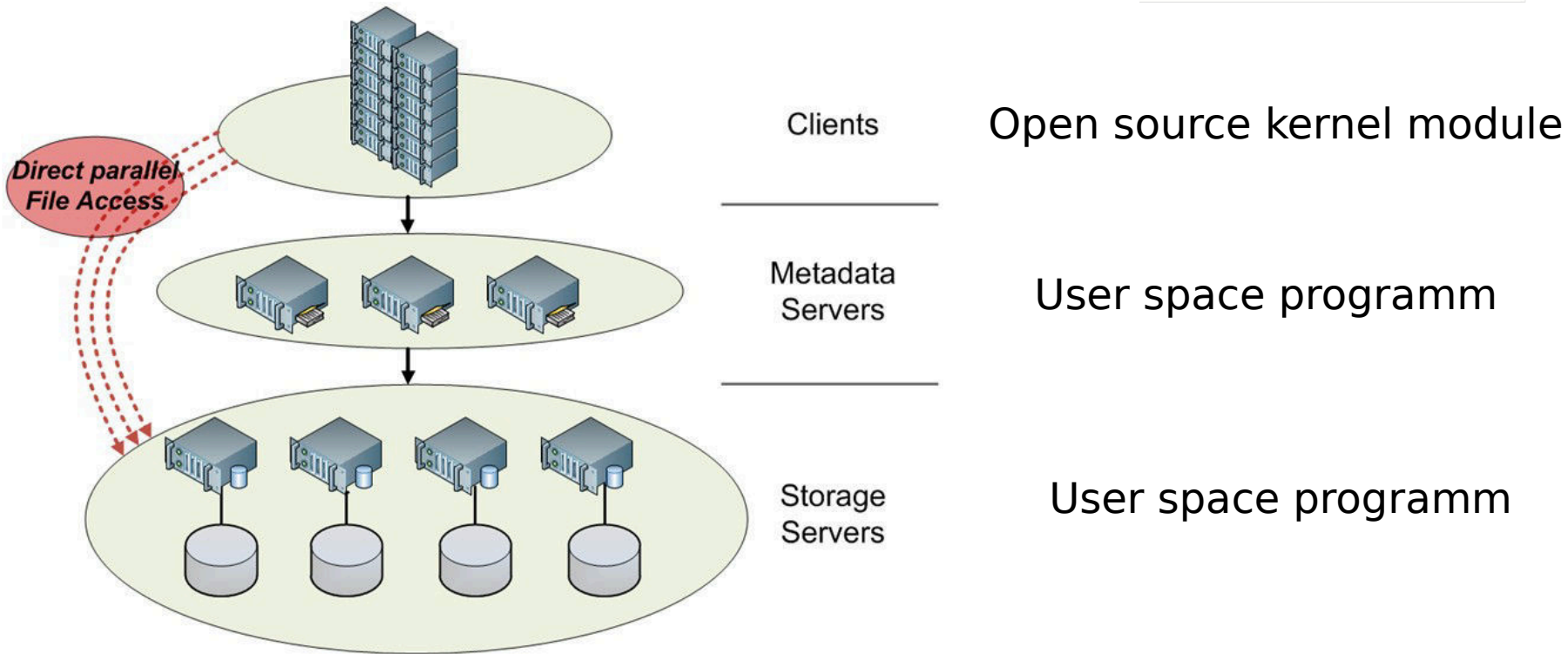


BeeGFS: Accelerating the access to BLAST and Galaxy Indices

Franz-Josef Pfreundt
Fraunhofer ITWM

Björn Grüning
Bioinformatics Uni Freiburg

The Fraunhofer Parallel File System



Scalable number of MDS and storage servers

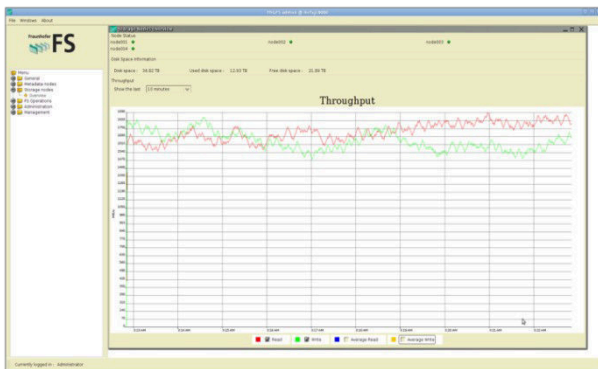
Easy to use



- Simple setup/startup
- Add clients and Servers at any time
- No specific Linux distribution
- No special hardware requirements
- No patching of the environment

Up and running in one hour!

- Graphical system administration & monitoring
- Excellent documentation and user support

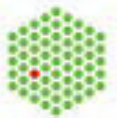


Flexibility



- Any combination of BeeGFS services on same machine
- No dedicated metadata hardware required
- Add clients and servers at runtime
- Flexible striping (per-file/per-directory)
- Multiple networks with dynamic failover
- Runs on top of XFS, EXT, ZFS, BTRFS

EMBL

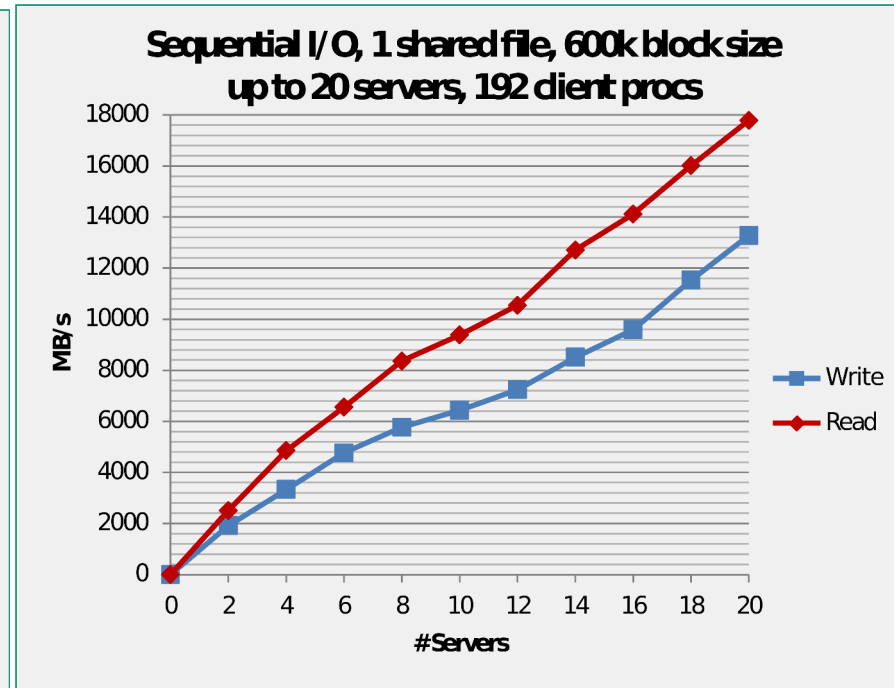
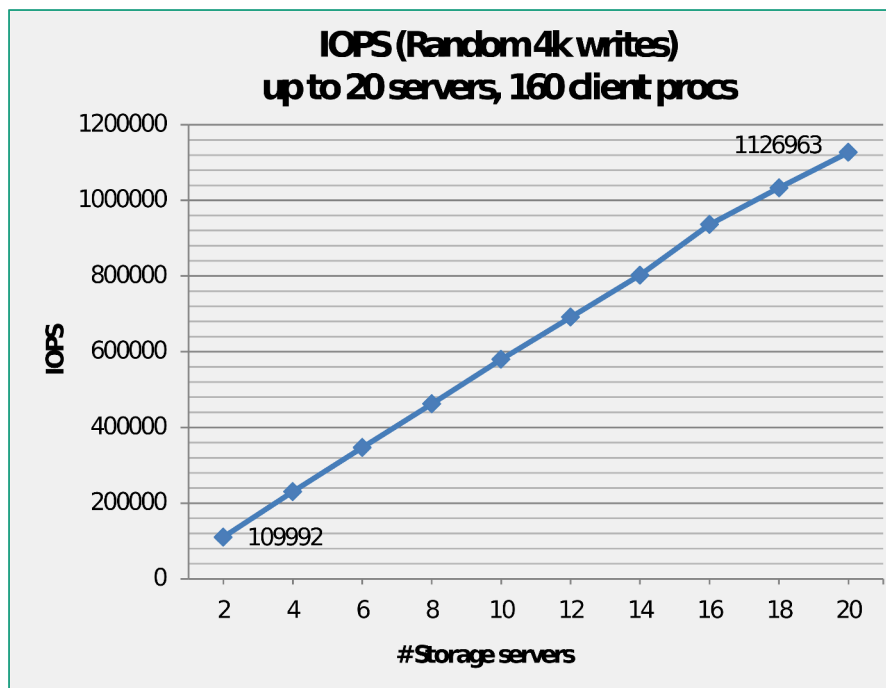


Bioinformatics
Research Center
BiRC Aarhus

- **„Big DATA“ Compute and Storage**
- **On Demand FileSystem**
- **BeeGFS in a virtualized environment**

Features & Performance for NGS

- High Single-Stream Throughput
- (write 3.5 GB/s , Read 4 GB on FDR IB)
- 500 000 file creates/sec on 20 SSD's



(Filesystem: SSD's distributed over 20 compute server)