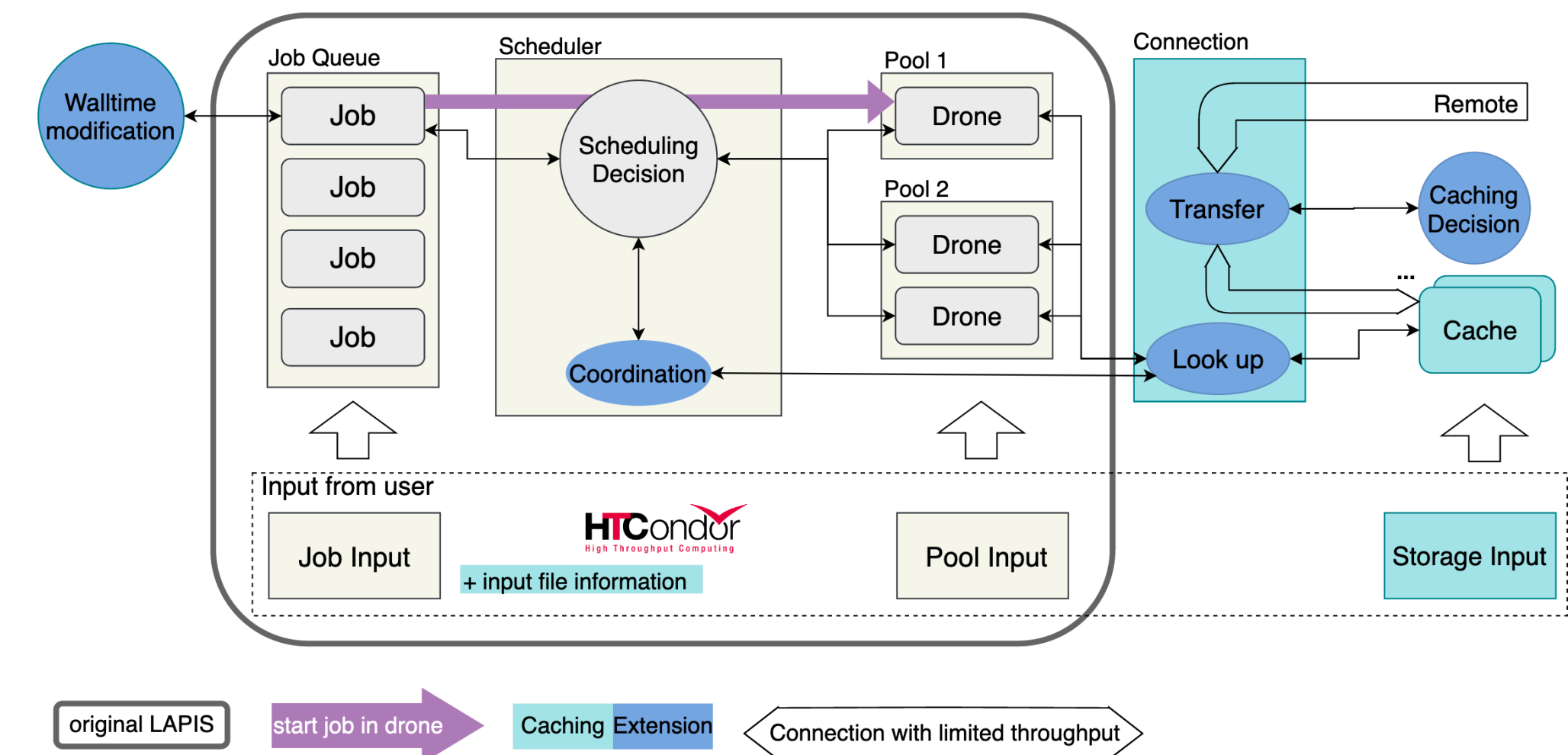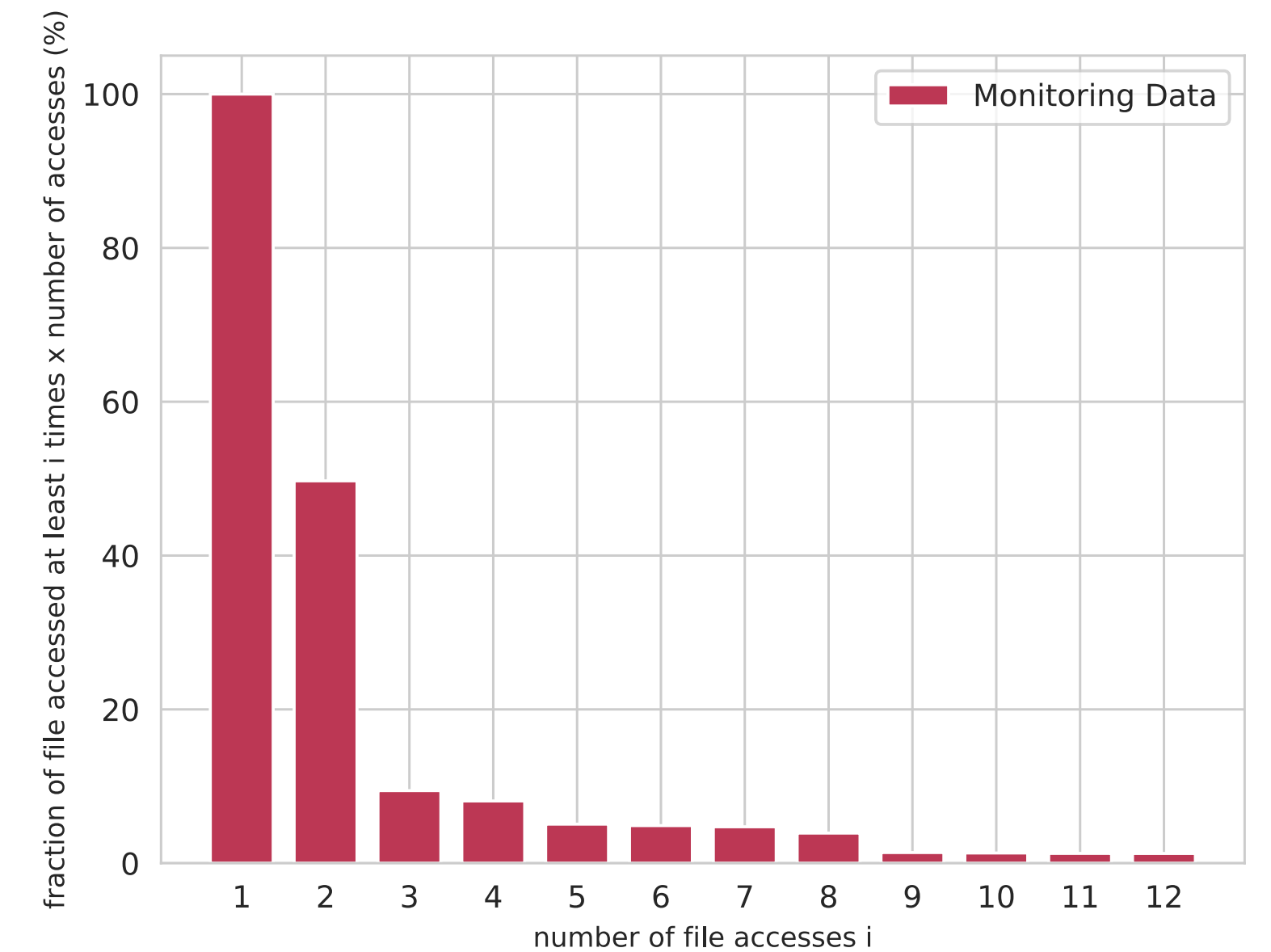# Status & Plans KIT

Manuel Giffels for the KIT Computing Team
FIDIUM Kickoff Meeting, 16.12.2021

Topic 2 - „Caching" - Status

- Deployment of XRootD proxy based caches on various compute resources based on work done at GSI (NEMO HPC, TOPAS, Open Telekom Cloud, etc.)
  - Not sufficient to study complexity of distributed coordinated caching (DCC)
    - → Decided to do simulations first
- XRootD monitoring has been developed and deployed @ KIT
  - Study cacheability of workflows
  - Collect data as input for simulations
- Started simulation of DCC
  - Cache coordination
  - Caching algorithms

Topic 2 - „Caching" - Plans

Work Plan (Proposal):

- **Work Package 2**
  - Development, maintenance and extension of a caching simulator
  - Simulation of complex systems with dynamic, distributed and coordinated caches
  - Comparison between different caching strategies

- **Work Package 3**
  - Integration of dynamic, distributed and coordinated caches into the compute infrastructure (Topic 1)
  - Data locality aware scheduling

We are looking forward to a successful collaboration with all partners & associates!

Manuel Giffels
ETP & SCC