



Ressourcen basierte Performance Metriken

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Metriken Ressourcen Nutzung

1. CPI
2. Flop Rates
3. Main Memory Bandwidth
4. Infiniband Network Utilization ??
5. File IO

Further Inputs

- Mikrobenchmarks
 - Memory Bandwidth
 - Network Bandwidth
 - File IO Bandwidth
- Lower Bounds for Resource Utilization
- Vision: Tile for each Job with color squares for every Resource. Green = OK, Red = Check
- Job Tile is marked according an analysis of all Resources
- Necessary: Time dimension needs to be taken into account

Idea for Breakout Session

- Unclear: What is necessary to judge Network and File IO Utilization? Omnipath, Lustre??
- Formulate Event sets for all Resources Metrics for
 - Haswell-EP
 - Broadwell-EP
 - Skylake-EP
- Which patterns could be detected automatically and which event sets are suitable to do so?
- How to measure: Measurement Frequency, Group cycling, Statistics, Filtering