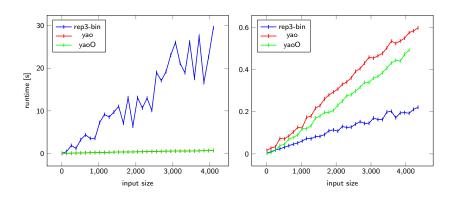
Sevarebench Measurement Results MP-SPDZ Replicated-Bin Scalable Search

December 10, 2022

RepSearch Internal Runtime



- Ref.Problem: Scalable Search v1

Protocols: MP-SPDZ

Metric: Input - Runtime

- Node: ether

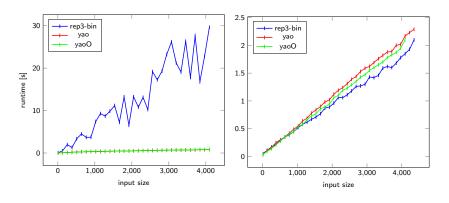
Ref.Problem: Scalable Search v2

Protocols: MP-SPDZ

Metric: Input - Runtime

Node: ether

RepSearch External Runtime



Ref.Problem: Scalable Search v1

Protocols: MP-SPDZMetric: Input - Runtime

- Node: ether

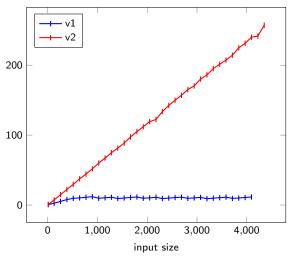
Ref.Problem: Scalable Search v2

Protocols: MP-SPDZ

Metric: Input - Runtime

Node: ether

RepSearch Compile Time



- Ref.Problem: Scalable Search

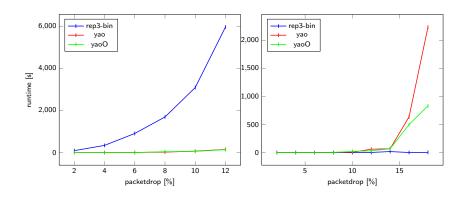
Protocols: MP-SPDZ

- Metric: Compile time

- Node: ether



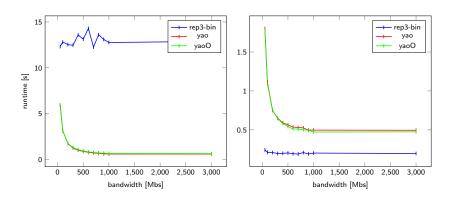
RepSearch Packetdrop at Input 4096



- Ref.Problem: Scalable Search v1
- Protocols: MP-SPDZ
- Metric: Packetdrops Runtime at input 4096
- Node: ether

- Ref.Problem: Scalable Search v2
- Protocols: MP-SPDZ
- Metric: Packetdrops Runtime at input 4096
- Node: ether

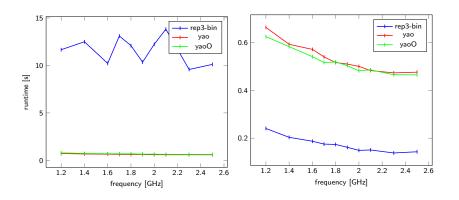
RepSearch Bandwidth at Input 4096



- Ref.Problem: Scalable Search v1
- Protocols: MP-SPDZ
- Metric: Bandwidth Runtime at input 4096
- Node: ether

- Ref.Problem: Scalable Search v2
- Protocols: MP-SPDZ
- Metric: Bandwidth Runtime at input 4096
- Node: ether

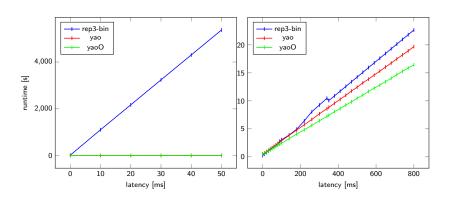
RepSearch Frequency at Input 4096



- Ref.Problem: Scalable Search v1
- Protocols: MP-SPDZ
- Metric: Frequency Runtime at input 4096
- Node: ether

- Ref.Problem: Scalable Search v2
- Protocols: MP-SPDZ
- Metric: Frequency Runtime at input 4096
- Node: ether

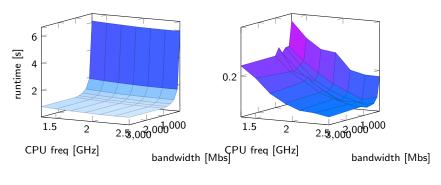
RepSearch Latency at Input 4096



- Ref.Problem: Scalable Search v1
- Protocols: MP-SPDZ
- Metric: Latency Runtime at input 4096
- Node: ether

- Ref.Problem: Scalable Search v2
- Protocols: MP-SPDZ
- Metric: Latency Runtime at input 4096
- Node: ether

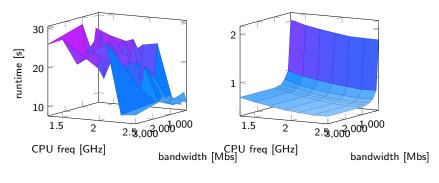
CPU Bandwidth Frequency Yao



- Ref.Problem: Scalable Search v1
- Protocols: MP-SPDZ
- Metric: Bandwidth Frequency -Runtime at input 4096
- Node: ether

- Ref.Problem: Scalable Search v2
- Protocols: MP-SPDZ
- Metric: Bandwidth Frequency -Runtime at input 4096
- Node: ether

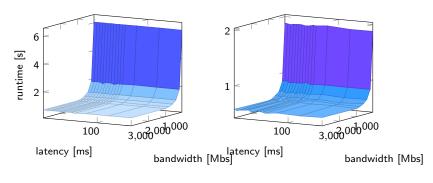
CPU Bandwidth Frequency rep3-bin



- Ref.Problem: Scalable Search v1
- Protocols: MP-SPDZ
- Metric: Bandwidth Frequency -Runtime at input 4096
- Node: ether

- Ref.Problem: Scalable Search v2
- Protocols: MP-SPDZ
- Metric: Bandwidth Frequency -Runtime at input 4096
- Node: ether

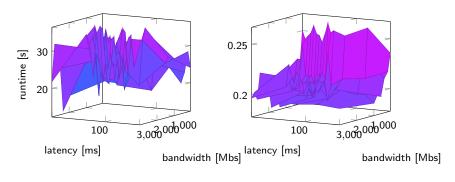
CPU Bandwidth Latency Yao



- Ref.Problem: Scalable Search v1
- Protocols: MP-SPDZ
- Metric: Bandwidth Latency -Runtime at input 4096
- Node: ether

- Ref.Problem: Scalable Search v2
- Protocols: MP-SPDZ
- Metric: Bandwidth Latency -Runtime at input 4096
- Node: ether

CPU Bandwidth Latency rep3-bin



- Ref.Problem: Scalable Search v1
- Protocols: MP-SPDZ
- Metric: Bandwidth Latency -Runtime at input 4096
- Node: ether

- Ref.Problem: Scalable Search v2
- Protocols: MP-SPDZ
- Metric: Bandwidth Latency -Runtime at input 4096
- Node: ether