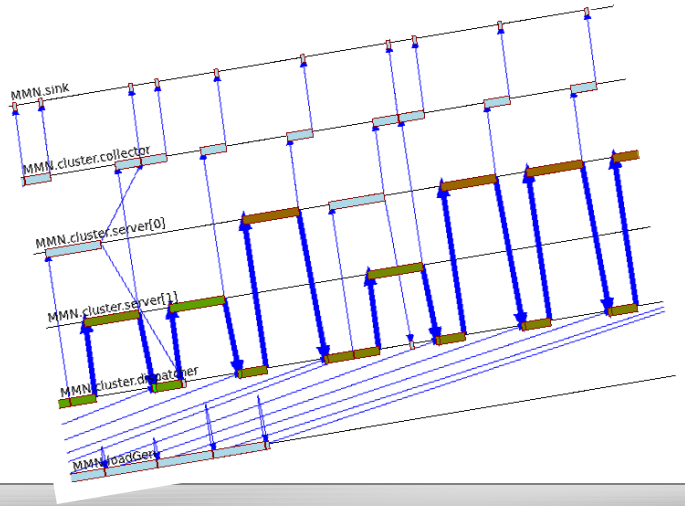


Extended

Sequence Chart

for Parallel Simulation in Horizon

Developing Parallel Simulations

Primary Goal of Parallel Simulation

Speedup over sequential simulation

Model Dependent Performance Factors

Event dependencies

Ev

Ev

Extend Eclipse Sequence Chart

Developer Requirements

- Identify performance bottlenecks
- Insight into simulation behavior
- Visualize performance factors

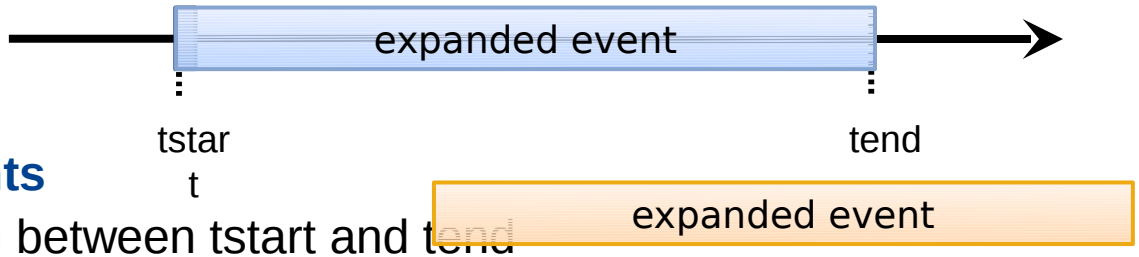
Horizon

Expanded Events

Model processes that span period of time

Augment discrete events with durations

- Discrete events span period of **simulated** time



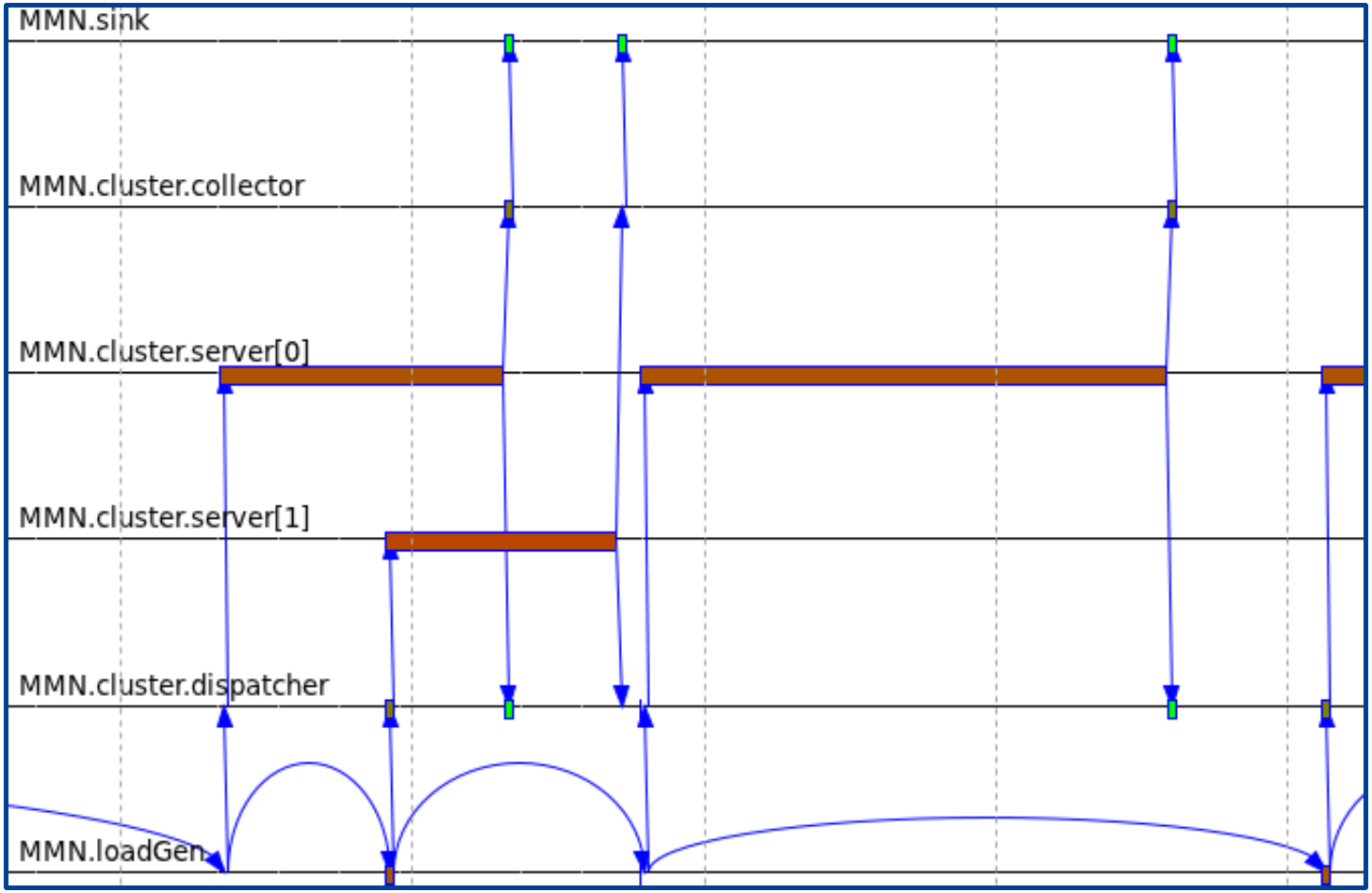
Independent Events

Events starting between tstart and tend

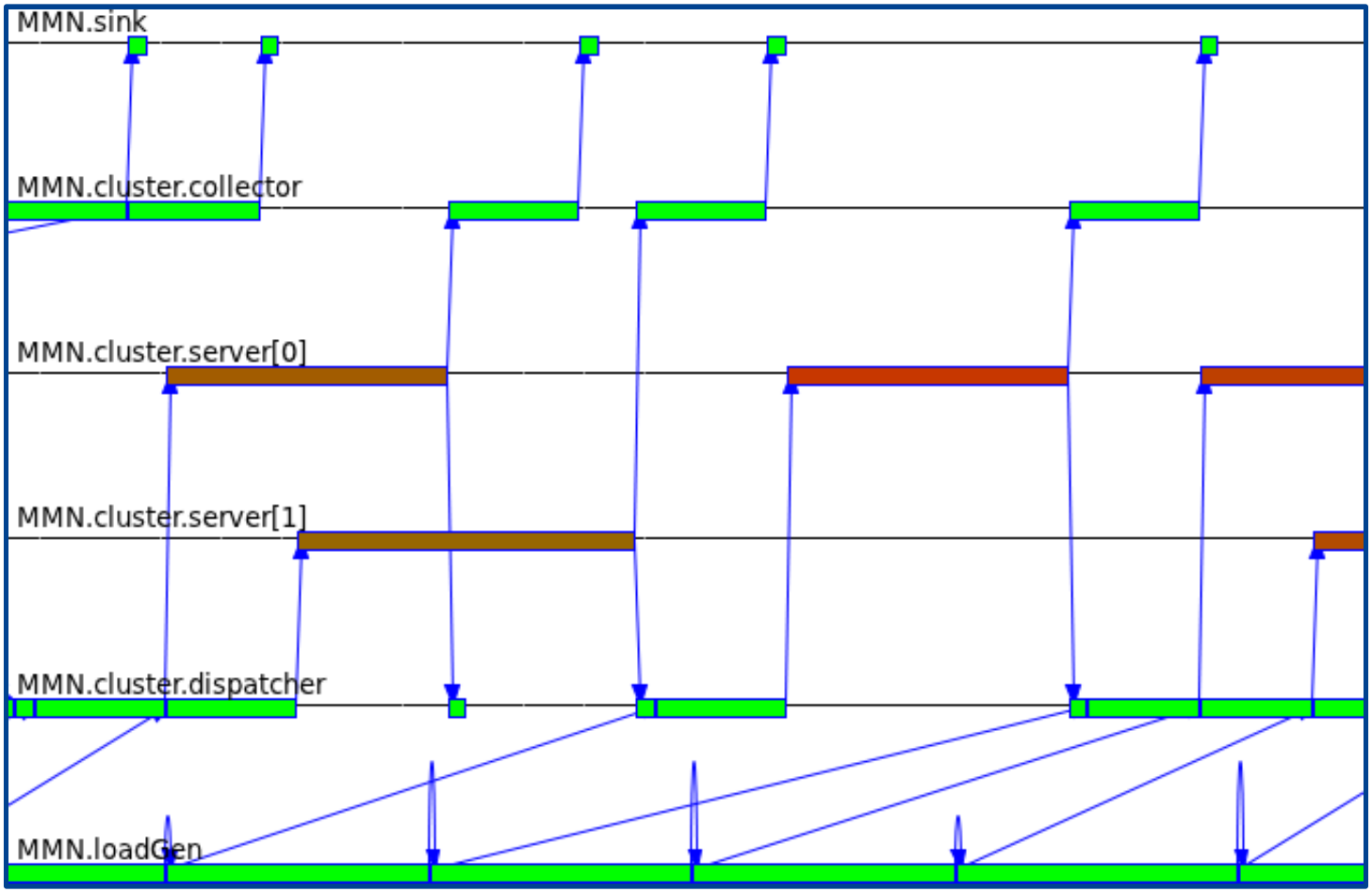
Do not depend on results generated by overlapping event

Modeling paradigm

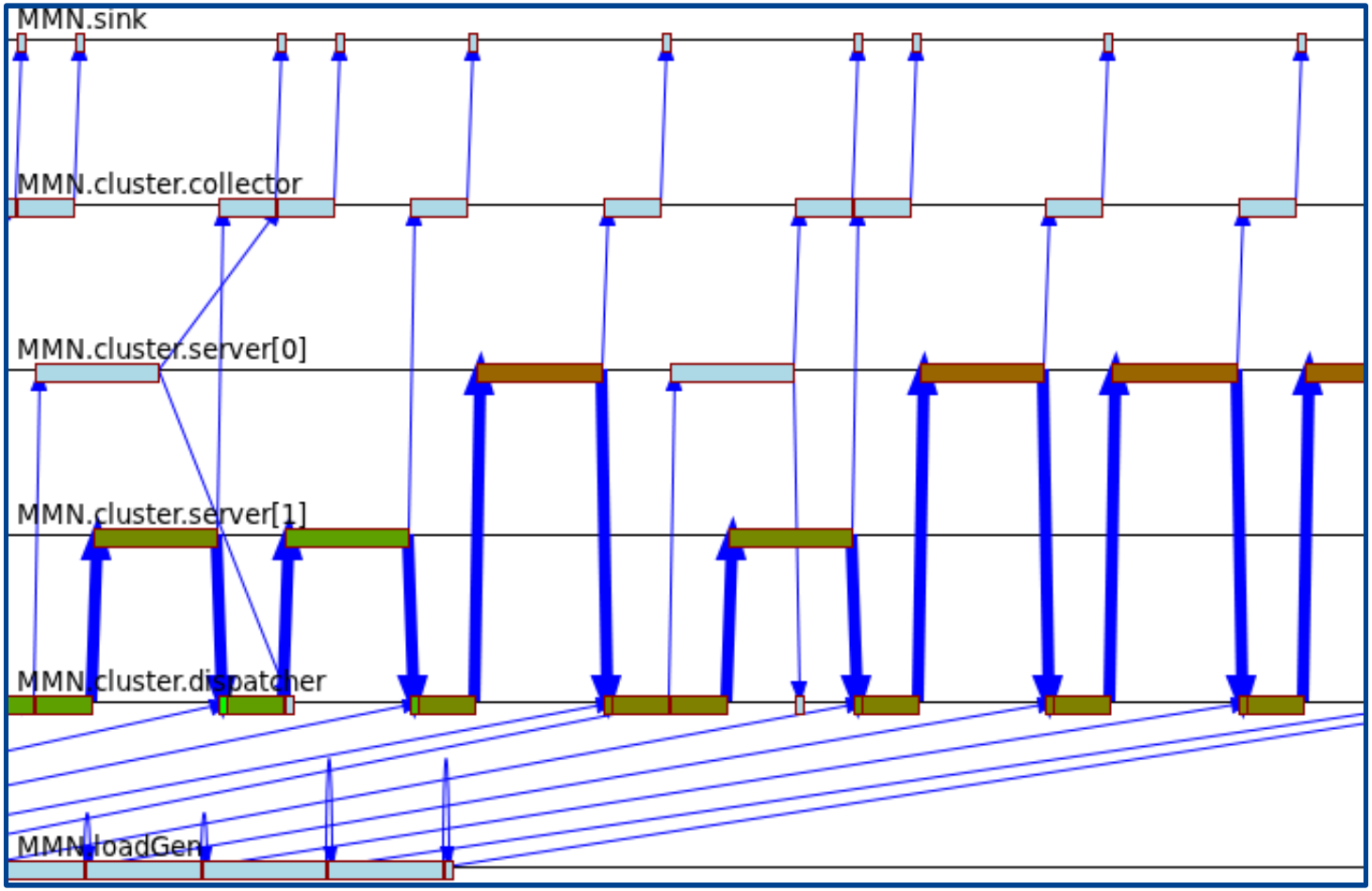
Event Durations



Event Complexities



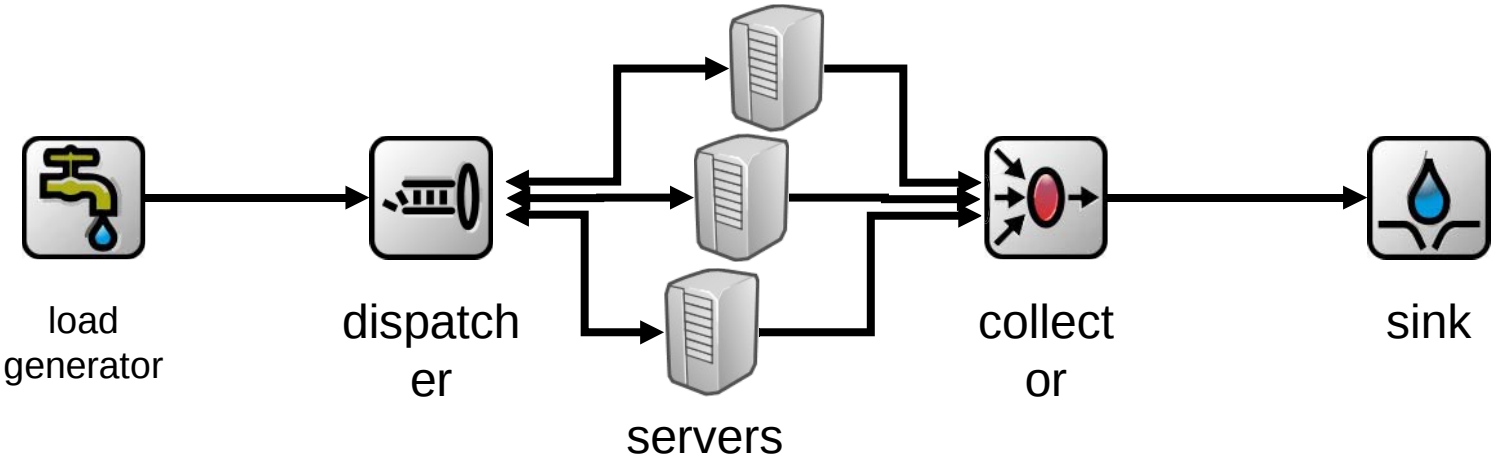
Critical Path



Extended Sequence Chart

Demo

Check out during poster session



Get Horizon and the Sequence Chart

https://code.comsys.rwth-aachen.de/redmine/projects/horizon-public

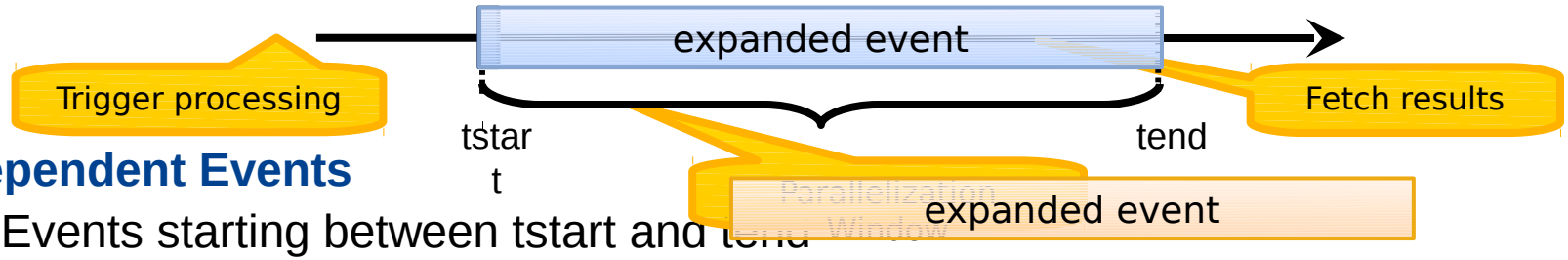
Horizon

Expanded Events

Model processes that span period of time

Augment discrete events with durations

- Discrete events span period of **simulated** time



Independent Events

Events starting between tstart and tend

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Modeling paradigm