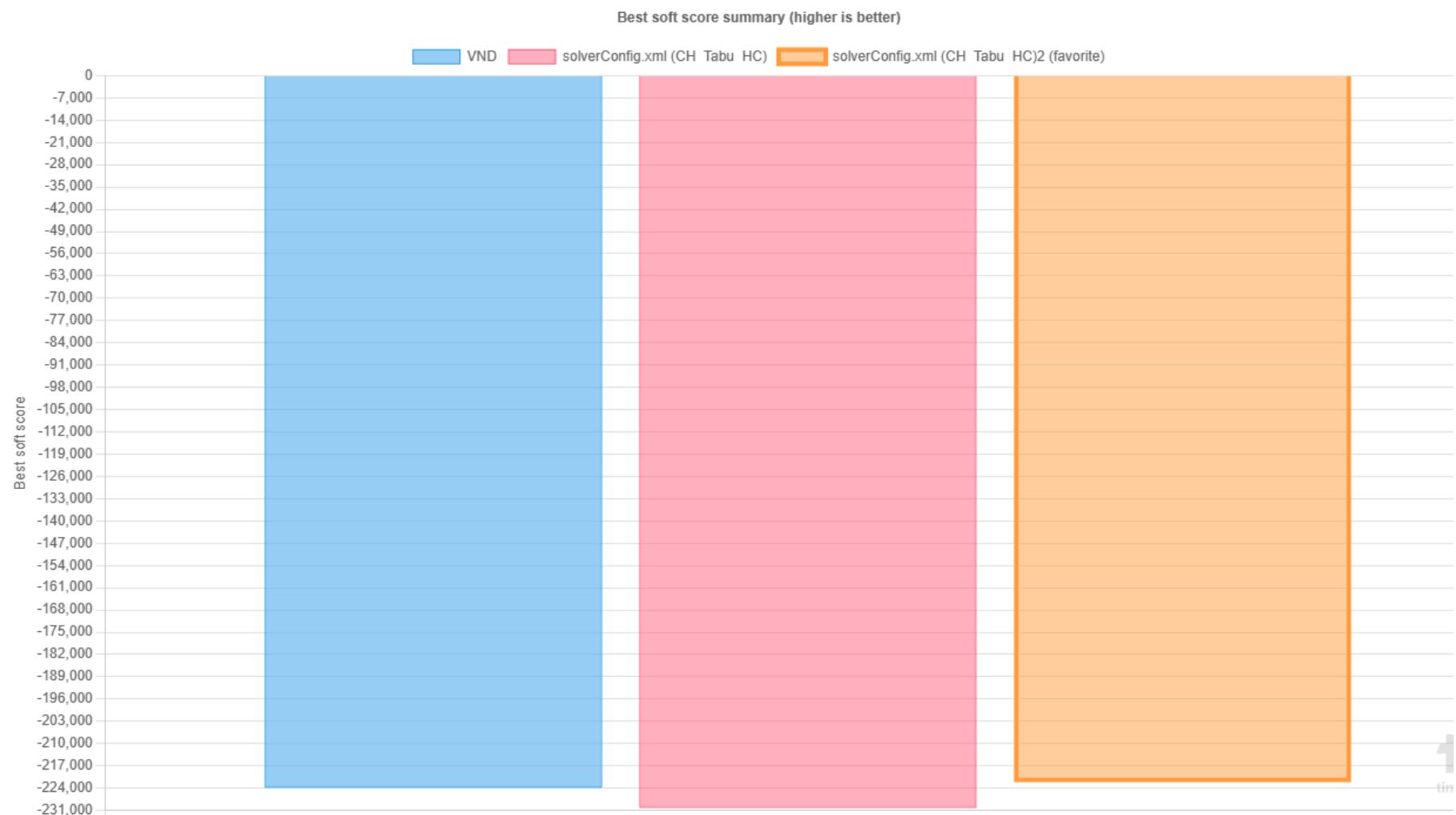


# Result summary

Best score   Best score scalability   Best score distribution   Winning score difference  
Worst score difference percentage (ROI)

Useful for visualizing the best solver configuration.



Solver	Total	Average	Standard Deviation	problem
				airport_auto_example_2
VND 1	0hard/-223914soft	0hard/-223914soft	0.0E0/0.0E0	0hard/-223914soft 1
solverConfig.xml (CH Tabu HC) 2	0hard/-230215soft	0hard/-230215soft	0.0E0/0.0E0	0hard/-230215soft 2
solverConfig.xml (CH Tabu HC)2 0	0hard/-222136soft	0hard/-222136soft	0.0E0/0.0E0	0hard/-222136soft 0

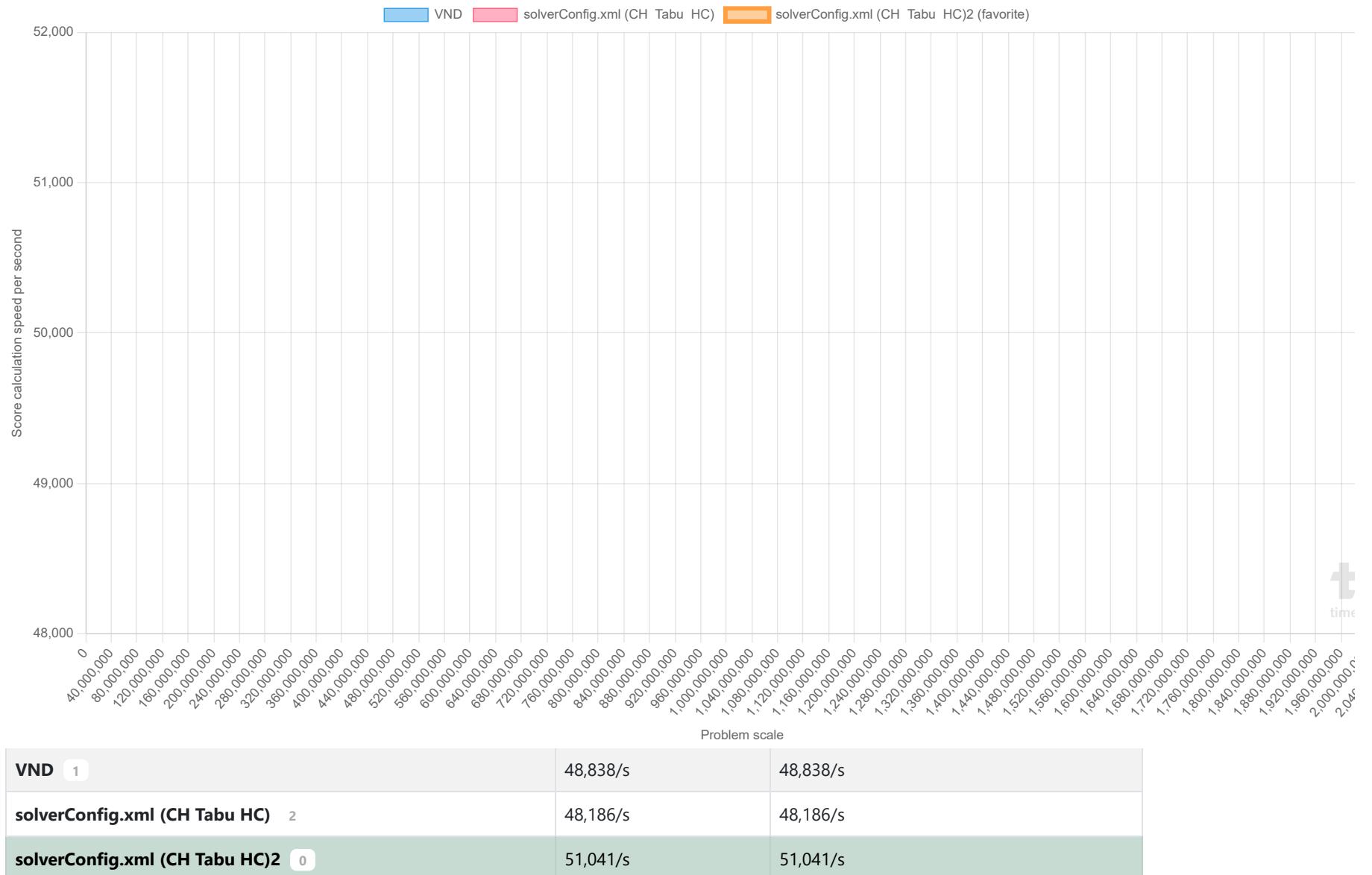
## Performance summary

Score calculation speed    Move evaluation speed    Worst score calculation speed difference percentage    Time spent

Time spent scalability    Best score per time spent

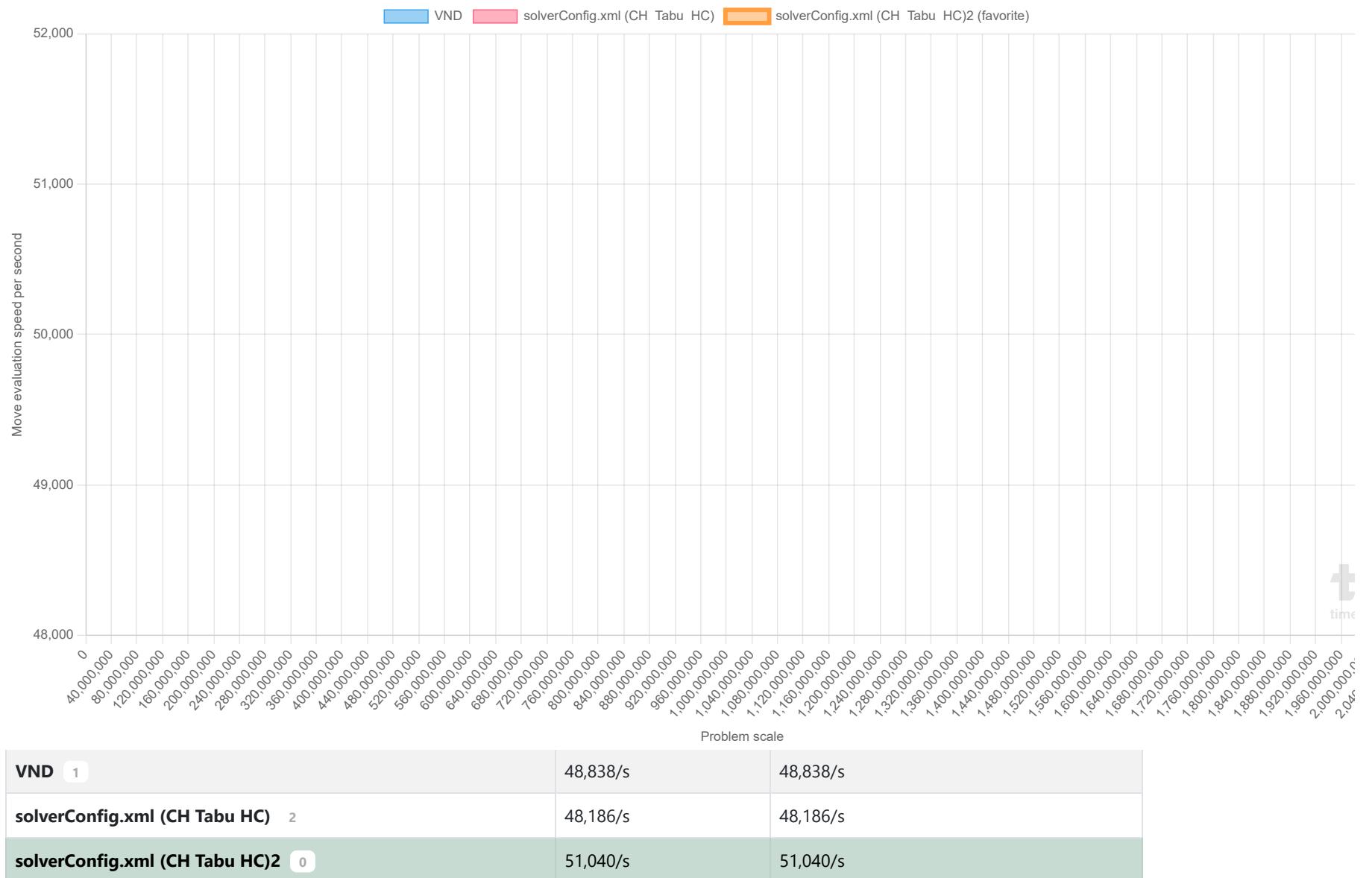
Useful for comparing different score calculators and/or constraint implementations (presuming that the solver configurations do not differ otherwise). Also useful to measure the scalability cost of an extra constraint.

#### Score calculation speed summary (higher is better)



Useful for comparing different score calculators and/or constraint implementations (presuming that the solver configurations do not differ otherwise). Also useful to measure the scalability cost of an extra constraint.

## Move evaluation speed summary (higher is better)



VND	1	48,838/s	48,838/s
<b>solverConfig.xml (CH Tabu HC)</b>	2	48,186/s	48,186/s
<b>solverConfig.xml (CH Tabu HC)2</b>	0	51,040/s	51,040/s

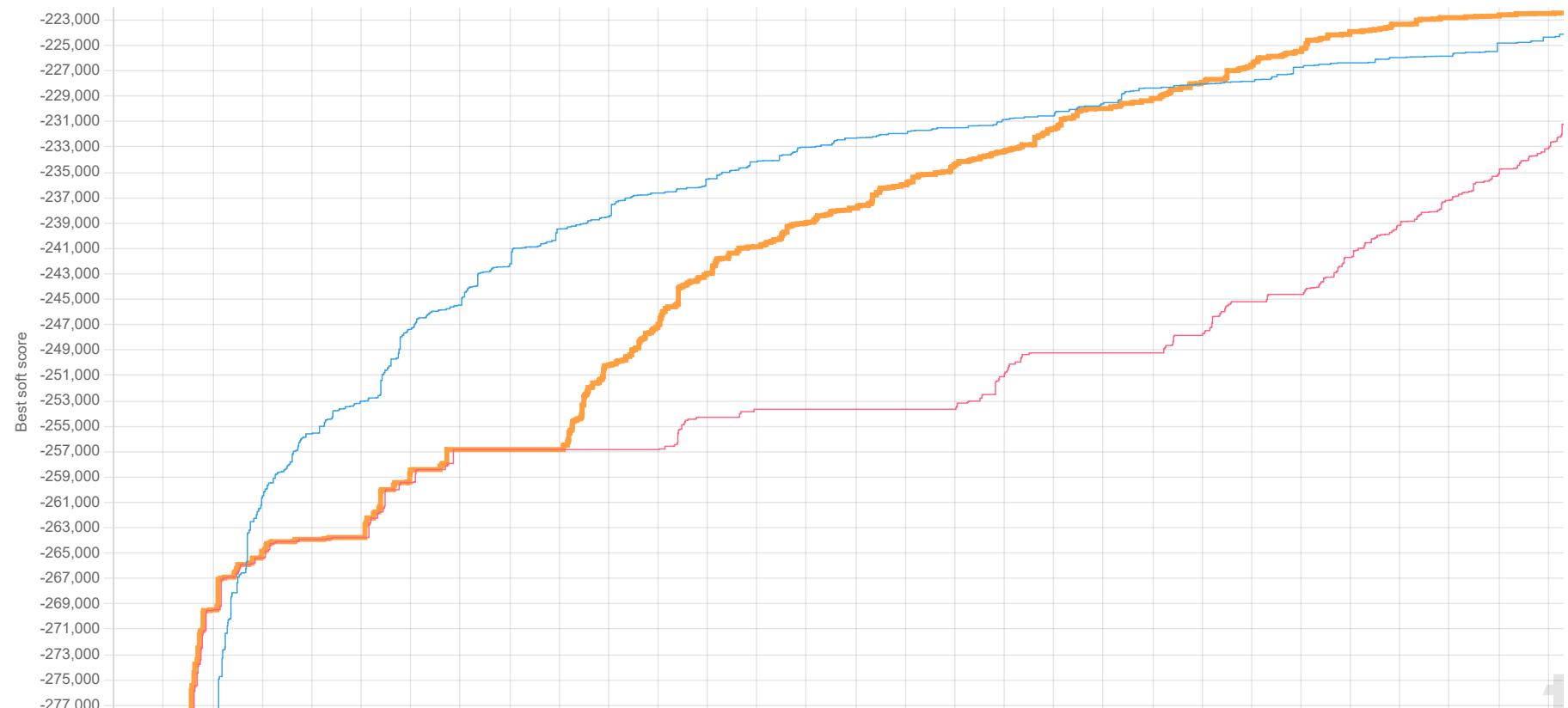
<b>Entity count</b>	40
<b>Variable count</b>	40
<b>Maximum value count</b>	800
<b>Problem scale</b>	2,044,214,644
<b>Time to load input solution</b>	0.006 s. (6 ms.)
<b>Memory usage after loading input solution</b>	10,965,570 bytes on average

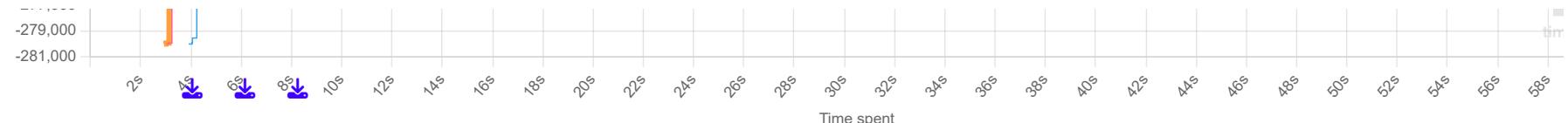
Step Score      Best Score      Picked Move Type Best Score Diff      Constraint Match Total Best Score

### Constraint Match Total Step Score

airport\_auto\_example\_2 best soft score statistic

VND solverConfig.xml (CH Tabu HC) solverConfig.xml (CH Tabu HC)2 (favorite)





## airport\_auto\_example\_2\_VND

**Explanation of score (0hard/-223914soft):**

**Constraint** matches:

- 163914soft: constraint (**Total** delay) has 501 matches:
  - 4500soft: justified **with** ([**null**])
  - 4314soft: justified **with** ([**null**])
  - ...
- 60000soft: constraint (**Company** terminal mismatch) has 600 matches:
  - 100soft: justified **with** ([**null**])
  - 100soft: justified **with** ([**null**])
  - ...
- 0: constraint (**Arrival** must finish before departure starts) has 0 matches:
- 0: constraint (**Gate** type mismatch) has 0 matches:
- 0: constraint (**Must** assign gate after scheduled time) has 0 matches:

**Indictments** (top 5 of 722):

- 4600soft: indicted **with** (**null**) has 2 matches:
  - 4500soft: constraint (**Total** delay)
  - 100soft: constraint (**Company** terminal mismatch)
- 4414soft: indicted **with** (**null**) has 2 matches:
  - 4314soft: constraint (**Total** delay)
  - 100soft: constraint (**Company** terminal mismatch)
- 3956soft: indicted **with** (**null**) has 2 matches:
  - 3856soft: constraint (**Total** delay)
  - 100soft: constraint (**Company** terminal mismatch)
- 3708soft: indicted **with** (**null**) has 1 matches:
  - 3708soft: constraint (**Total** delay)
- 3639soft: indicted **with** (**null**) has 1 matches:
  - 3639soft: constraint (**Total** delay)

...

## airport\_auto\_example\_2\_solverConfig.xml (CH Tabu HC)

**Explanation of score (0hard/-230215soft):**

**Constraint** matches:

- 166815soft: constraint (**Total** delay) has 522 matches:
  - 4874soft: justified **with** ([**null**])
  - 4720soft: justified **with** ([**null**])
  - ...
- 63400soft: constraint (**Company** terminal mismatch) has 634 matches:

```

-100soft: justified with ([null])
-100soft: justified with ([null])
...
0: constraint (Arrival must finish before departure starts) has 0 matches:
0: constraint (Gate type mismatch) has 0 matches:
0: constraint (Must assign gate after scheduled time) has 0 matches:
Indictments (top 5 of 740):
-4974soft: indicted with (null) has 2 matches:
-4874soft: constraint (Total delay)
-100soft: constraint (Company terminal mismatch)
-4820soft: indicted with (null) has 2 matches:
-4720soft: constraint (Total delay)
-100soft: constraint (Company terminal mismatch)
-4398soft: indicted with (null) has 2 matches:
-4298soft: constraint (Total delay)
-100soft: constraint (Company terminal mismatch)
-3910soft: indicted with (null) has 1 matches:
-3910soft: constraint (Total delay)
-3672soft: indicted with (null) has 1 matches:
-3672soft: constraint (Total delay)
...

```

## airport\_auto\_example\_2\_solverConfig.xml (CH Tabu HC)2

**Explanation of score (0hard/-222136soft):**

**Constraint** matches:

```

-161836soft: constraint (Total delay) has 510 matches:
-4510soft: justified with ([null])
-4324soft: justified with ([null])
...
-60300soft: constraint (Company terminal mismatch) has 603 matches:
-100soft: justified with ([null])
-100soft: justified with ([null])
...
0: constraint (Arrival must finish before departure starts) has 0 matches:
0: constraint (Gate type mismatch) has 0 matches:
0: constraint (Must assign gate after scheduled time) has 0 matches:
Indictments (top 5 of 729):
-4610soft: indicted with (null) has 2 matches:
-4510soft: constraint (Total delay)
-100soft: constraint (Company terminal mismatch)
-4424soft: indicted with (null) has 2 matches:
-4324soft: constraint (Total delay)
-100soft: constraint (Company terminal mismatch)
-4140soft: indicted with (null) has 2 matches:
-4040soft: constraint (Total delay)

```

```

-100soft: constraint (Company terminal mismatch)
-4016soft: indicted with (null) has 1 matches:
-4016soft: constraint (Total delay)
-3586soft: indicted with (null) has 2 matches:
-3486soft: constraint (Total delay)
-100soft: constraint (Company terminal mismatch)
...

```

## Solver benchmarks

VND 1 solverConfig.xml (CH Tabu HC) 2 solverConfig.xml (CH Tabu HC)2 0

```

<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<solver xmlns="https://timefold.ai/xsd/solver">
  <environmentMode>PHASE_ASSERT</environmentMode>
  <monitoring>
    <metric>STEP_SCORE</metric>
    <metric>BEST_SCORE</metric>
    <metric>PICKED_MOVE_TYPE_BEST_SCORE_DIFF</metric>
    <metric>CONSTRAINT_MATCH_TOTAL_BEST_SCORE</metric>
    <metric>CONSTRAINT_MATCH_TOTAL_STEP_SCORE</metric>
  </monitoring>
  <solutionClass>lv.lu.eztf.dn.combopt.evrp.domain.EVRPsolution</solutionClass>
  <entityClass>lv.lu.eztf.dn.combopt.evrp.domain.Gate</entityClass>
  <entityClass>lv.lu.eztf.dn.combopt.evrp.domain.Visit</entityClass>
  <scoreDirectorFactory>
    <constraintProviderClass>lv.lu.eztf.dn.combopt.evrp.solver.ConstraintStreamCostFunction</constraintProviderClass>
  </scoreDirectorFactory>
  <termination>
    <secondsSpentLimit>60</secondsSpentLimit>
  </termination>
  <constructionHeuristic/>
  <localSearch>
    <unionMoveSelector>
      <subListChangeMoveSelector/>
      <listChangeMoveSelector/>
      <listSwapMoveSelector/>
      <kOptListMoveSelector/>
    </unionMoveSelector>
    <acceptor>
      <stepCountingHillClimbingSize>1</stepCountingHillClimbingSize>
      <stepCountingHillClimbingType>IMPROVING_STEP</stepCountingHillClimbingType>
    </acceptor>
    <forager>

```

```

<acceptedCountLimit>1</acceptedCountLimit>
</forager>
</localSearch>
</solver>

```

## Environment Information

<b>Name</b>	2026-01-18_173604
<b>Aggregation</b>	false
<b>Failure count</b>	0
<b>Starting timestamp</b>	2026. gada 18. janv. 17:36:04
<b>Warm-up time spent</b>	0.030 s. (30 ms.)
<b>Parallel benchmark count / available processors</b>	1 / 12
<b>Benchmark time spent</b>	03:00.933 s. (180,933 ms.)
<b>Environment mode</b>	PHASE_ASSERT
<b>Logging level for ai.timefold.solver.core</b>	DEBUG
<b>Solver ranking class</b>	TotalScoreSolverRankingComparator
<b>VM max memory (as in -Xmx but lower)</b>	8,573,157,376 bytes
<b>Timefold Solver version</b>	Community Edition v1.27.0
<b>Java version</b>	Java 17.0.12 (Oracle Corporation)
<b>Java VM</b>	Java Java HotSpot(TM) 64-Bit Server VM 17.0.12+8-LTS-286 (Oracle Corporation)
<b>Operating system</b>	Windows 10 amd64 10.0
<b>Report locale</b>	Unknown
<b>Report timezone</b>	Europe/Riga