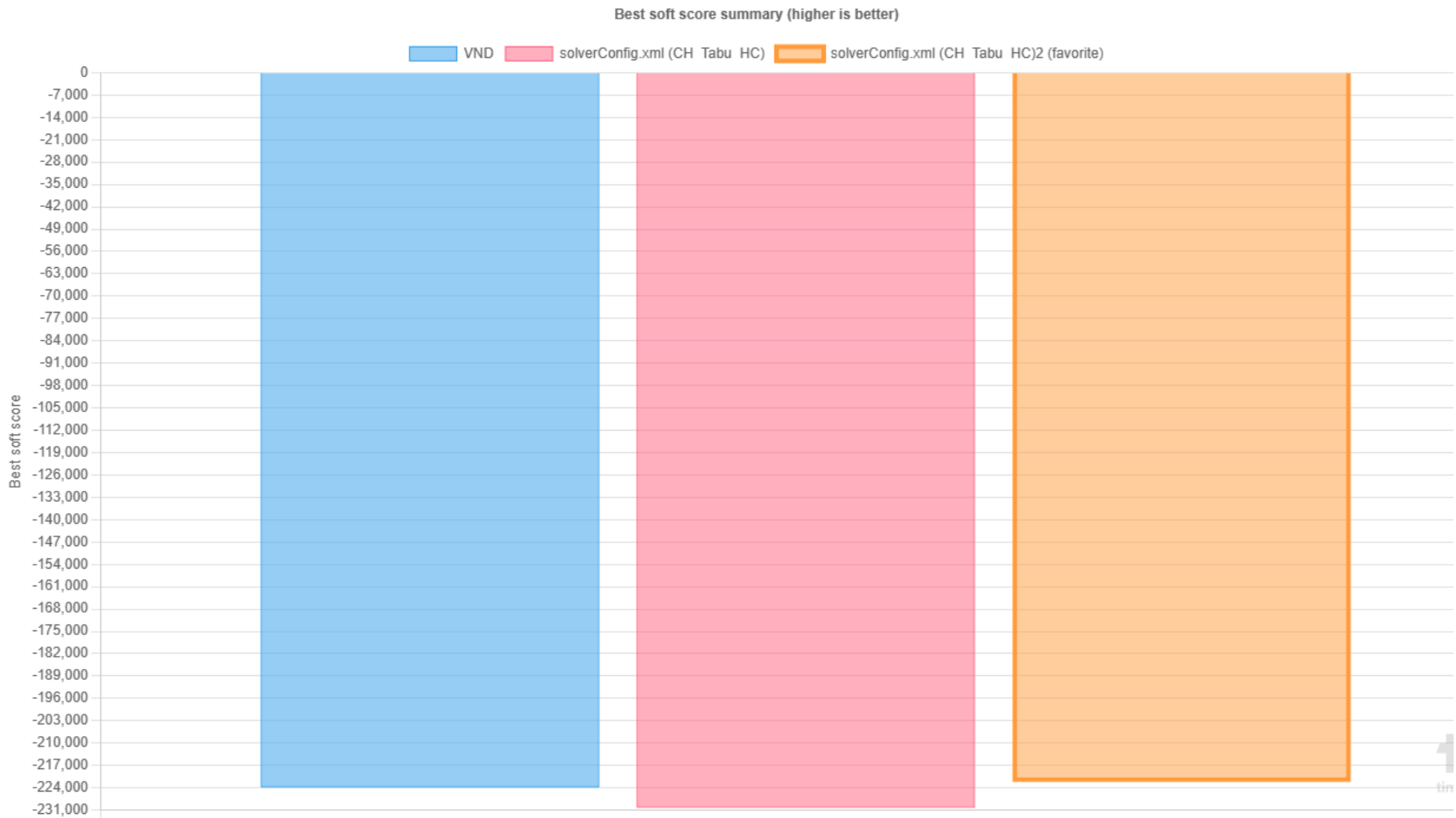


Result summary

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

Useful for visualizing the best solver configuration.



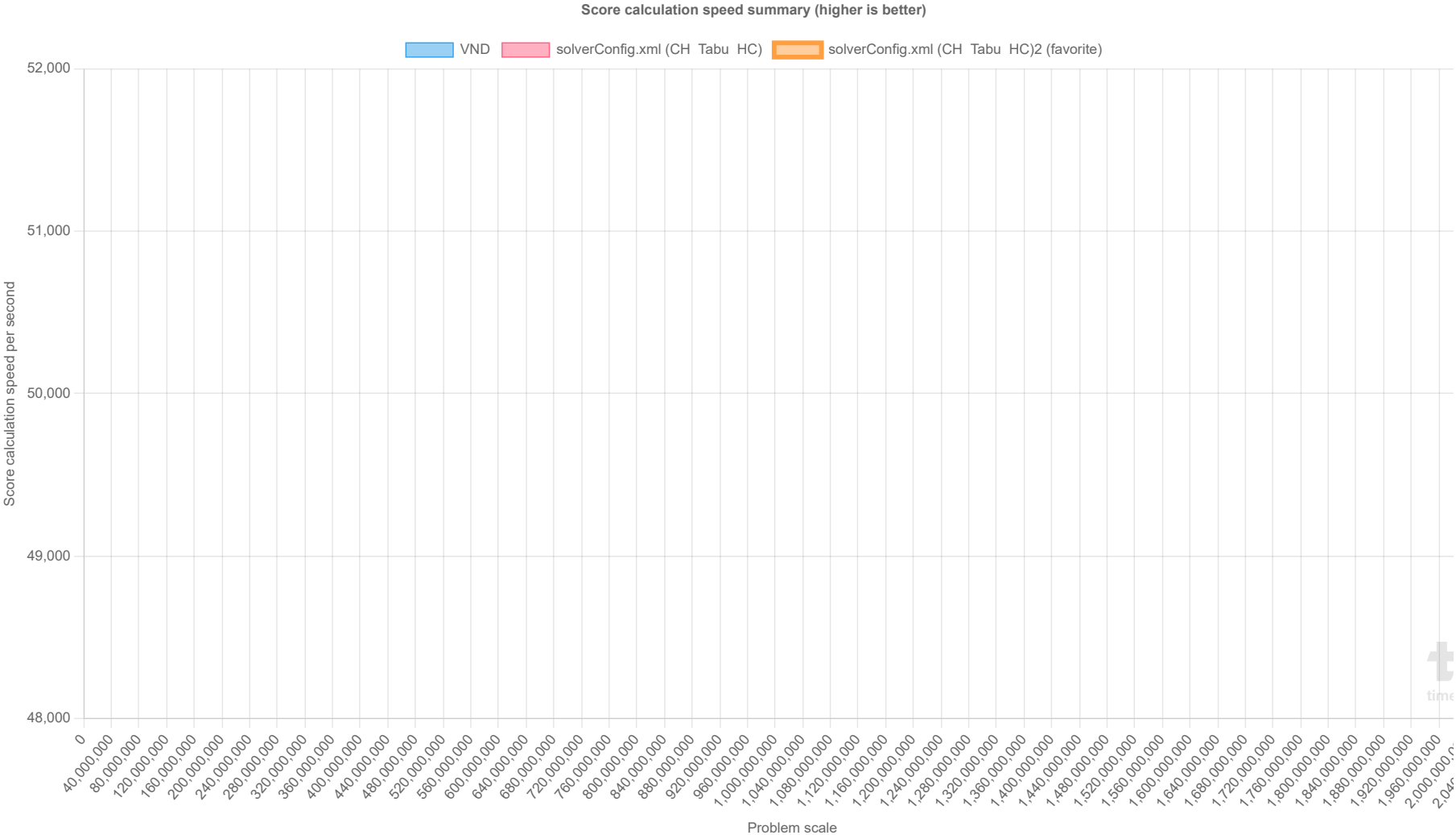
Solver	Total	Average	Standard Deviation	problem
				airport_auto_example_2
VND 1	0hard/-223914soft	0hard/-223914soft	0.0E0/0.0E0	0hard/-223914soft 1
solverConfig.xml (CH Tabu HC) 2	0hard/-230215soft	0hard/-230215soft	0.0E0/0.0E0	0hard/-230215soft 2
solverConfig.xml (CH Tabu HC)2 0	0hard/-222136soft	0hard/-222136soft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

Performance summary

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

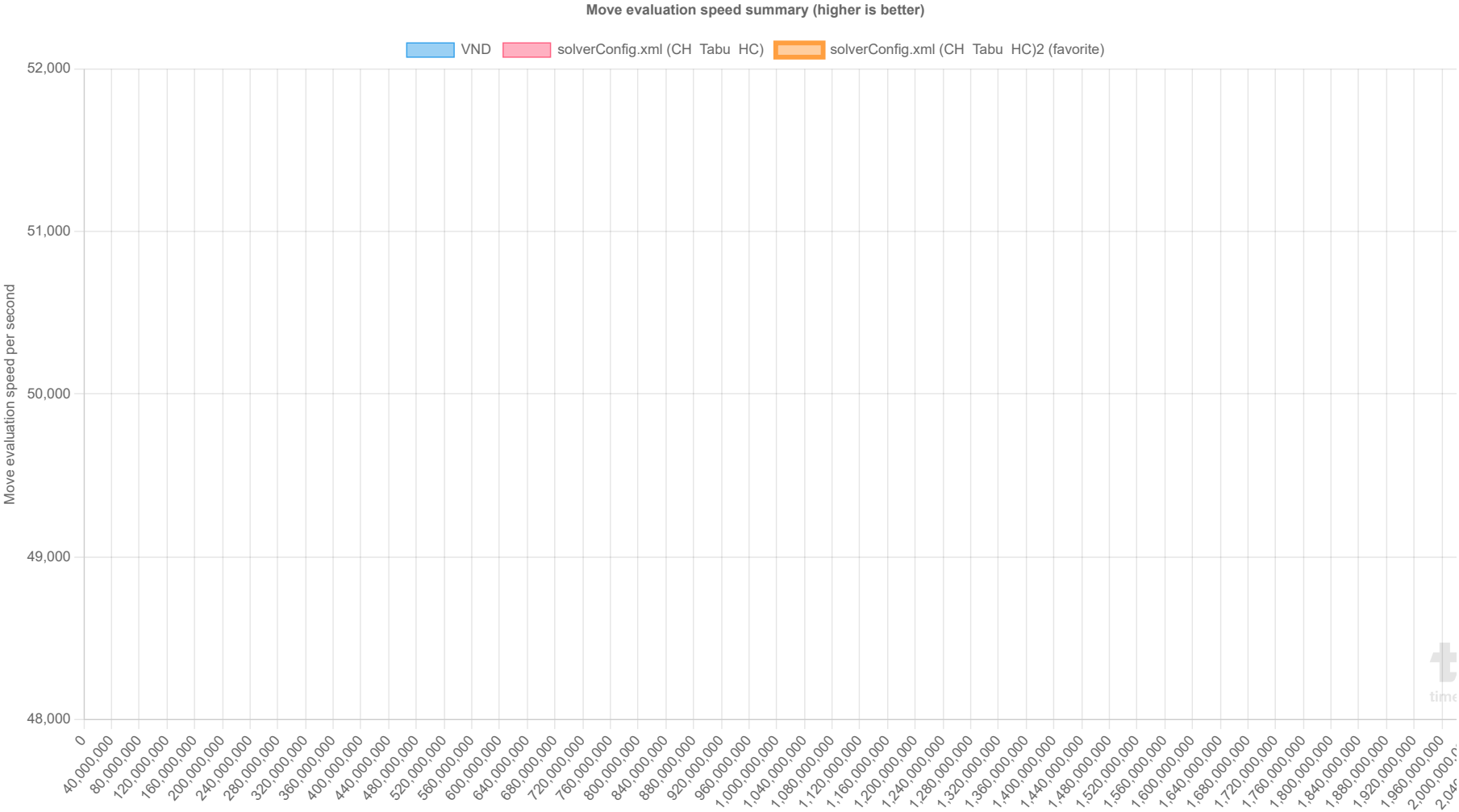
Time spent scalability Best score per time spent

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.



VND 1	48,838/s	48,838/s
solverConfig.xml (CH Tabu HC) 2	48,186/s	48,186/s
solverConfig.xml (CH Tabu HC)2 0	51,041/s	51,041/s

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.



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

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

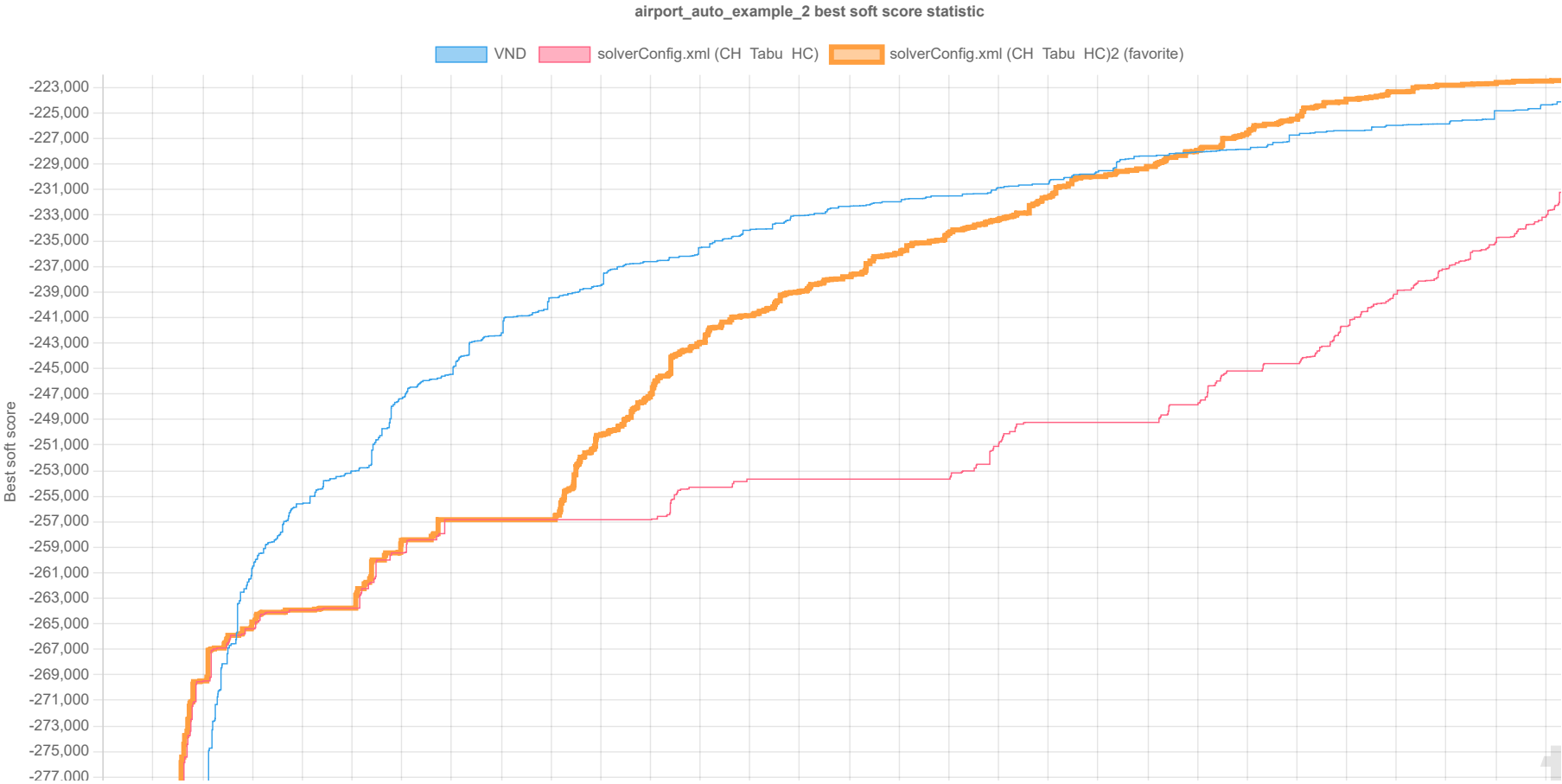
Step Score

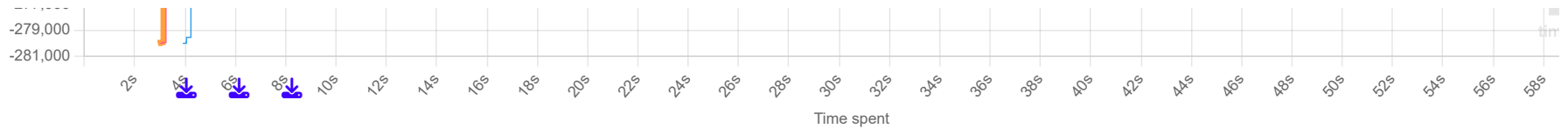
Best Score

Picked Move Type Best Score Diff

Constraint Match Total Best Score

Constraint Match Total Step Score





airport_auto_example_2_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

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