

Scoring with Judge Thread

We have 4 criteria on which scoring is based. Total score is sum of the 4 criteria:

- Functional tests (max 30 points)
- Load tests (max 40 points)
- Diversity (max 10 points)
- Cloud costs (max 20 points)

Each team can trigger their run by providing the base url of their API endpoints and clicking on the run button on the dashboard. Couple of main points regarding test runs:

- For scoring we are taking into consideration **only the last run!** If you had better response times in the previous run for example, it will not count anymore.
- The last run can be initiated before Saturday at 12:00PM (noon) CET. Any run after that will not be considered.
- Only teams initiate the runs for themselves, when they want. There will be no automatic triggers by Judge Thread.

1. Functional tests

Maximum points: 30

Each endpoint has functional tests which are validating its correctness. All tests for that endpoint must pass in order to gain points. If one fails, 0 points are associated. Functional tests must all pass in order to get points for that endpoint.

endpoint	Functional tests pass [points]	Functional tests fail [points]
/switch/price	2	0
/switch/call	3	0
/listing/{calling}	5	0
/financial/invoice	6	0
/financial/invoice/{id}	6	0
/financial/report/{calling}	8	0

Total: 30

2. Load tests

Maximum points: 40

We are measuring average response time per endpoint.

Prerequisite to run load tests: functional tests for that endpoint have passed in the current run. Each endpoint has its own load tests. Scoring is relative to other teams, since we are comparing who is faster. The fastest one gets X points (depending on the endpoint being tested). The others get proportion of X, depending on the avg execution time of the fastest one.

endpoint	Load tests max points (X) <i>If the run is the currently the fastest</i>
/switch/price	8
/switch/call	12
/financial/invoice	10
/listing/{calling}	10

Total: 40

For example: Load tests are run for invoice, and we have results for 3 teams:

Team1 : 1.34s

Team2: 1.89s

Team3: 5.2s

Since Team 1 is the fastest, they get 10 points (based on the table above), Team2 gets $(10 \times 1.34) / 1.89 = 7.09$ points and Team3: $(10 \times 1.34) / 5.2 = 2.57$ points

3. Diversity

Maximum points: 10

Formula for calculating diversity: $\frac{\text{number of unique job title}}{\text{number of team members}} * 10$

Points for this category are already assigned.

4. Cloud cost

Maximum points: 20

Like Load tests, this category is also relative to other teams. Team who spend the least money on cloud will be allocated 20 points. The others will be sorted descending and given points proportionally. Formula is the same like in the example for load tests.

Maximum costs per team are \$75. If the team spends more it gets disqualified.