## International Technical Committee Report

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Martin Mareš ITC Report 2023

The ITC has three main purposes:

- Assist the current host *Planning and implementation*
- Develop and maintain long term tools and systems Mailing list, wiki, task development tools, ...
- Transfering knowledge and experience to future hosts Observing three years of HTC and ITC work

We helped the host with technical issues.

Cooperation with the host was excellent. They did an **amazing** job!

We helped investigate some of the deeper problems (e.g., performance issues of Matrix server and the rank list).

- Security of grading
- Performance of CMS
- Efficient grading of interactive tasks
- New programming languages

IOI tools (available at *https://ioi.github.io/*):

- Sandbox (Isolate) new version about to be released
- Translation system
- Task preparation system
- Contest utilities
- Technical checklist for future hosts

ITC webpage: https://itc.ioinformatics.org/

## **Contributions welcome**

Developed for IOI in Iran, still maintained by Kian Mirjalali.

News:

- The documentation is now complete and up-to-date: https://github.com/ioi-2017/tps/tree/master/docs
- The installation process is now much easier.
- A test suite (around 1500 tests)
- Better export to CMS or DOMjudge
- A tps stress command for finding a hacking test case for an incorrect solution

Previously, we used a fresh instance of a Matrix server every year.

Now, we moved to a long-term server which will hopefully serve for multiple years.

We had to do a lot of performance tuning this year, but it is hopefully stable now.

For the future: Consider federation with other Matrix server.

Mailing lists:

- **ioi-announce** low-volume, moderated, please subscribe Plan: automatic subscription by IOI registration system
- ioi-discuss general discussion
- ioi-ic, ioi-sc, ioi-tc members of the committees
- ioi-ga members of the GA, temporary list during the IOI
- **ioi-training** connecting organizers of regional training camps with people interested in teaching
- https://lists.ioinformatics.org/

Other:

- Task proposal dropbox (to be replaced soon)
- Internal ISC/ITC systems (e.g., IOI archive)

## THANK YOU!

