

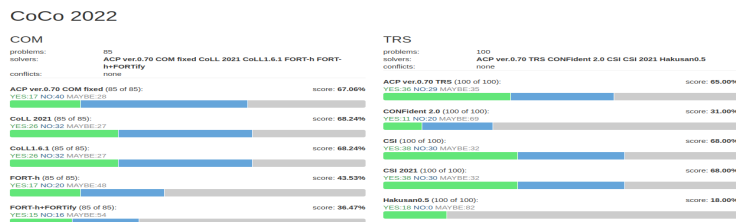


LiveView

A Work in Progress

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What is LiveView?



Overview

- visualization of the Confluence Competition
- bachelor project of Andreas Parschalk (completed 2015)
- CoCo website link 2017 (oldest data 2014)
- <http://cocograph.uibk.ac.at/>

Outline

1. Current LiveView

2. LiveView 2.0

3. Automating CoCo

Features

LiveView

- visualize competition run on StarExec
 - categories/tracks
 - participants
- excitement
- visualize results in real time
- highlight YES/NO conflicts
- shows last processed benchmark

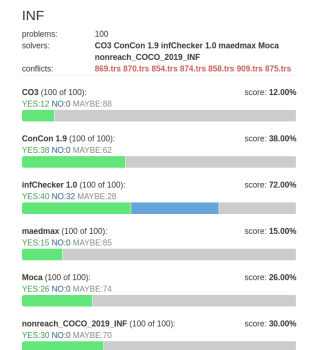


Figure: CoCo 2019

Issues

- **no source!**
- even small issues (almost) impossible to fix
 - renaming tools on StarExec
 - changes in the spaces
- no automation
 - testing
 - job creation
- StarExecCommand

advantage: maintained by StarExec

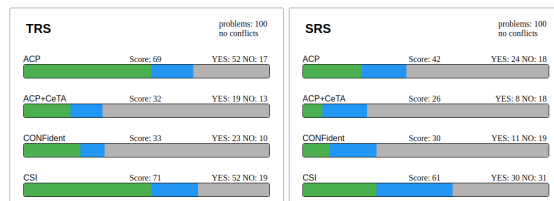
disvantage: maintained by StarExec (current version not working)

LiveView 2.0

Goals

- reimplement LiveView
- have most/all features of previous version
- more maintainable
- also support additional features

Current State



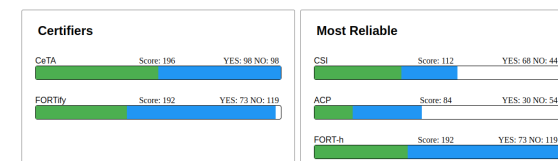
Features

- most visible features of old LiveView are implemented
- links to tables on database website
- conflicts can be viewed in detail
- support for the **new certified categories**

Combined Categories

CoCo 2023 - Certification Categories

- Certification
rank certifiers based on **number validated certificates**
- Reliability
rank tools based on **number produced valid certificates**



Implementation

- **fetch data** \implies display data
- ARI database website already does a lot of what we want

Summary

status	AGCP	AGCP_2022	FORT-h	FORT-h+FORTify	total
YES	37	37	6	5	41
(sec)	1.68	1.68	0.13	2.23	
NO	21	21	12	10	22
(sec)	5.15	5.35	2.59	38.70	
MAYBE	42	42	82	85	88
(sec)	838.28	840.42	0.00	120.79	
total	100	100	100	100	

Some Details

- backend: **Ruby CGI scripts**
 - produces HTML on three endpoints
 - /year=2023
 - full page
 - /category?year=2023&name=TRS
 - normal category
 - /combined-category?year=2023&name=Certifiers
 - new category
 - frontend **htmx**
- ```
<div hx-get="category.cgi?year=2023&name=TRS"
 hx-trigger="load delay:5s"
 hx-swap="outerHTML"
>
```

## Outlook

- make prettier
- more control over StarExec job
- automate configuration

### possible features

- virtual best solver
- filter view
  - only certified outputs
  - hide last years tools

What would you like to see?

## Running CoCo

### Setup Competition

- submission space per tool
- run tests
- extract test results
- competition space
- competition job
- not easily possible on StarExec



Figure: CoCo space

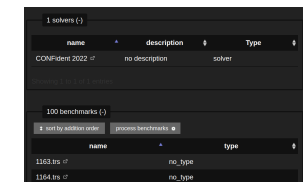


Figure: CSR track

## End of StarExec 2025/2026

Is it worth automating this now? I don't think so

### More Important

update CoCoWeb

- possibility to use both ARI and COPS format
- maintain old tools

What would **you** like to see in LiveView?