

Test Harness

From ICPC-Contest Control Standard

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A Test Harness is an automated testing framework.

This article contains information about the input, output and tests for systems implementing the [CCS](#)

Comment This needs to be split into two articles, keep requirements in this one, and move other information to another article [Douglas Lane](#) 17:47, 17 April 2011 (CEST)

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Input to the Test Harness

File name

[contest.yaml](#) file

[problem.yaml](#) and all associated files

[group.tsv](#) file

[teams.tsv](#) file

[userdata.tsv](#) file

Testing Configuration Changes

Description	Input	Compare to	Notes
Test contest information	Load contest.yaml file	Event Feed	missing default-clars
Test problems configuration	Load problemset.yaml and Problem format files	Event Feed	missing everything except: letter, name, balloon color, balloon color RGB
Test language configuration	Load languages.yaml file	Event Feed	missing compiler, compiler-args, runner, runner-args
Test testcase configuration	Load Problem format file	Event Feed	TBD
Test group configuration	Load group.tsv file	Event Feed	missing Group ID

Test team configuration	Load teams.tsv file	Event Feed	missing Reservation ID, Group ID, Country
Test validator	Load Problem format file	TBD	TBD
Test judgement names	contest.yaml	Event Feed	TBD
Test notification	Judgement	Event Feed	TBD

Testing Run Submissions

Description	Input	Compare to
Test run submission	Scriptable Submissions runs	Event Feed
Test run judgement	Scriptable Submissions runs	Event Feed

Testing Clarifications

Description	Input	Compare to
Test clar submission	Scriptable Submissions clars	Event Feed
Test clar answered	Scriptable Submissions clars	Event Feed

Comment: There is currently no CCS-defined way to automatically answer a clarification
[Douglas Lane](#) 03:57, 20 February 2011 (CET)

Testing Standings

Description	Input	Compare to
Test standings change	Scriptable Submissions runs	scoreboard.tsv

Testing Notifications

Description	Input	Compare to
Test notification sent	Scriptable Submissions runs	Not defined

Testing [Prohibited Operations](#)

In order to test each of the Prohibited Operation a set of standardized messages needs to be defined.

Operation	Expected Message
Using libraries except those explicitly allowed	Team's program used unauthorized library/function
Executing other programs	Team's program executed program "/bin/perl"
Creating new processes	Team's program tried to start new process
Creating new threads	Team's program attempted to create a thread
Reading any files	Team's program tried to read file "c.in"
Creating files	Team's program tried to create file "c.in"
Sending signals to other programs	Team's program tried to use a signal N
Side-stepping time or memory limits	Team's program attempted to exceed limit Team's program attempted to exceed memory limit

Sending or receiving network traffic

Team's program tried to write network output
Team's program tried to read network input

Testing Validators

Per the [Output validator](#) article test validators to report proper results, esp. file format.

Comment TODO complete writing this section [Douglas Lane](#) 23:31, 28 February 2011 (CET)

Test

[Reporting a judgment](#) TBD

[Reporting Additional Feedback](#) TBD

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