The event feed is a set of data output by the Contest Control System.

# Contents

# Getting the feed

## Authentication

'''

'''

ICPC Collaborative Learning Institute Event Feed

## Accessing the feed

~~Connect to port 4713 and the entire feed for the contest will be sent to you. When the contest is finalized, the contest tag will be closed and the connection closed.~~

Connect to port 4714 and the entire feed for the contest will be sent to you, with the exception that no judgement information will be sent for runs submitted during the last hour. When the contest is finalized, the contest tag will be closed and the connection closed (but you will still not get judgements for runs submitted the last hour).

---

## Account Types

All events are sent to Admin and Resolver, all other types stop receiving TBD events when contest is frozen.

| Type | Description |
|---|---|
| Admin | All events |
| Balloon | Balloon Notifications only |
| Commentator | TBD, request team source code |
| Floor / Team | TBD |
| Judge | TBD |
| Public | TBD |
| Resolver | All events |

# File format

The event feed is an XML document within the root element <contest>.

```
<contest version="1.0">
  <info ... />
  <language ... />
  ...
</contest>
```

version
        the format version. Must be "1.0"

All events are separate elements at the top level.

Event types/tags

| Event/Element | Contains |
|---|---|
| info | contest information and updates |
| language | submission language information |
| region | super region information |
| judgement | judgement information |
| problem | problem information |
| team | team information |
| clar | submitted clarification information and updates |

| run | submitted run information and updates |
| --- | --- |
| testcase | judgement of individual test cases for a run |
| notification | balloon notification |
| finalized | the contest standings/medals are assigned, contest is over |

Notes

1. Submission events have a contest-time element in minutes
2. Timestamped events all have a timestamp element in decimal seconds.
3. The `<finalized>` element is followed by a `</contest>` tag

_____

## info

```
<info>
  <title>The 2010 World Finals of the ACM International Collegiate Programming Contest</title>
  <length>05:00:00</length>
  <penalty>20</penalty>
  <started>false</started>
  <starttime>1265335138.26</starttime>
</info>
```

title
    contest title string
length
    length of contest in HH:MM:SS format
penalty
    penalty time in minutes
started
    started flag
starttime
    starttime as a timestamp in decimal seconds

## language

```
<language>
  <name>C++</name>
</language>
```

name
    language name

## region

```
<region external-id="3012">
  <name>Europe</name>
</region>
```

external-id
    identifier (integer) from groups.tsv (Group ID)
name
    super-region name from groups.tsv

## judgement

```
<judgement>
  <acronym>CE</acronym>
  <name>Compile Error</name>
</judgement>
```

acronym

      judgement acronym

name

      descriptive name

## problem

```
<problem id="1" state="enabled">
  <label>A</label>
  <name>APL Lives!</name>
  <color rgb="#ffff00">yellow</color>
</problem>
```

id

      problem identifier

state

      one of enabled, paused, disabled

label

      one letter label

name

      descriptive name

color

      color name, typically used for balloons

rgb

      color rgb value

## team

```
<team id="1" external-id="23412">
  <name>American University of Beirut</name>
  <nationality>LBN</nationality>
  <university>American University of Beirut</university>
  <region>Europe</region>
</team>
```

id

      team identifier. from teams.tsv (team number)

external-id

      team id from teams.tsv (Reservation ID)

name

      team name from teams.tsv

nationality

      nationality as ISO 3166-1 alpha-3, from teams.tsv

university

      university affiliation, from teams.tsv

region

      super region name  groups.tsv from teams.tsv

## clar

```
<clar id="1" team-id="0" problem-id="1">
  <answer>The number of pieces will fit in a signed 32-bit integer.</answer>
  <question>What is the upper limit on the number of pieces of chocolate requested by the friends?
  <to-all>true</to-all>
  <contest-time>118.48</contest-time>
  <timestamp>1265335256.74</timestamp>
</clar>
```

id
> clarification identifier

team-id
> team ID

problem-id
> problem ID

question
> A question, typically from a team.

answer
> The judges answer to the question

to-all
> true if the clarification was sent to all teams

contest-time
> contest (elapsed) time in minutes

timestamp
> the current computer time when this element was created, decimal seconds

## run

```
<run id="1410" team-id="74" problem-id="4">
  <language>C++</language>
  <judgement>WA</judgement>
  <penalty>true</penalty>
  <contest-time>17960.74</contest-time>
  <timestamp>1265353100.29</timestamp>
</run>
```

id
> run identifier

team-id
> team ID

problem-id
> problem ID

language
> language name

judgement
> judgement acronym

penalty
> penalty flag

contest-time
> official submission time used for scoring

timestamp
> the current computer time when this element was created

## testcase

```
<testcase run-id="1">
  <i>1</i>
  <n>1</n>
  <judgement>WA</judgement>
  <contest-time>939.75</contest-time>
  <timestamp>1265336078.01</timestamp>
</testcase>
```

run-id

      TBD

i

      testcase number

n

      total number of testcases

judgement

      judgement acronym

contest-time

      TBD

timestamp

      the current computer time when this element was created

## notification

A notification should be sent the first time a team solves a particular problem. It is not sent for rejected solutions, nor if the team submits another successful solution to the same problem. If a previously accepted run is rejected due to rejudging, no notification is sent.

```
<notification id="214" team-id="34">
 <team>U Waterloo</team>
 <contest-time>132.04</contest-time>
 <timestamp>1298733213.10</timestamp>
 <balloon problem-id="2">
   <label>B</label>
   <name>Bulls and bears</name>
   <color rgb="ff0000">red</color>
 </balloon>
 <first-by-team>true</first-by-team>
 <balloons>
   <balloon problem-id="4">
     <label>D</label>
     <name>Down the hill</name>
     <color rgb="33cc00">green</color>
   </balloon>
   <balloon problem-id="6">
     <label>F</label>
     <name>Failing to make the grade</name>
```

```
      <color rgb="ffff00">yellow</color>
    </balloon>
 </balloons>
</notification>
```

Sent for each balloon to be printed. Contains:

id
    id of notification, sequential starting at 1 (int)
team-id
    Team's number in contest (1, 2, etc) (int)
team
    Team name (same as or similar to team sign) (string)
contest-time
    minutes since contest started, contest time (float)
timestamp
    the current computer time when this element was created, decimal seconds
balloon
    balloon info, see balloon element below
first-in-contest
    required only when true (bool)
first-for-problem
    required only when true (bool)
first-by-team
    required only when true (bool)
balloons
    list of balloons team should have (including this balloon)

**balloon**

Describes a balloon for a problem

problem-id
    the id of the problem
label
    A, B, etc (character)
name
    name / title of problem (string)
rgb
    3-byte RGB value encoded in hex (string)
color
    color name (string)

## finalized

Note that the finalized element is followed immediately by a `</contest>` tag.

```
<finalized>
  <last-gold>4</last-gold>
  <last-silver>8</last-silver>
  <last-bronze>12</last-bronze>
  <comment>Finalized by John Doe and Jane Doe</comment>
  <timestamp>1265336078.01</timestamp>
</finalized>
```

notification                                                                7

timestamp
 TBD
last-gold
 integer, last place to receive a gold
last-silver
 integer, last place to receive a silver
last-bronze
 integer, last place to receive a bronze
comment
 text