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

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Getting the feed

Authentication
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.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin</td>
<td>All events</td>
</tr>
<tr>
<td>Balloon</td>
<td>Balloon Notifications only</td>
</tr>
<tr>
<td>Commentator</td>
<td>TBD, request team source code</td>
</tr>
<tr>
<td>Floor / Team</td>
<td>TBD</td>
</tr>
<tr>
<td>Judge</td>
<td>TBD</td>
</tr>
<tr>
<td>Public</td>
<td>TBD</td>
</tr>
<tr>
<td>Resolver</td>
<td>All events</td>
</tr>
</tbody>
</table>

File format

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

```xml
<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

<table>
<thead>
<tr>
<th>Event/Element</th>
<th>Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>info</td>
<td>contest information and updates</td>
</tr>
<tr>
<td>language</td>
<td>submission language information</td>
</tr>
<tr>
<td>region</td>
<td>super region information</td>
</tr>
<tr>
<td>judgement</td>
<td>judgement information</td>
</tr>
<tr>
<td>problem</td>
<td>problem information</td>
</tr>
<tr>
<td>team</td>
<td>team information</td>
</tr>
<tr>
<td>clar</td>
<td>submitted clarification information and updates</td>
</tr>
</tbody>
</table>
Event_feed

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

<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>

Language

<name>C++</name>

Region

<region external-id="3012">
<name>Europe</name>
</region>
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?</question>
<to-all>true</to-all>
<contest-time>118.48</contest-time>
<timestamp>1265335256.74</timestamp>
</clar>

**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>126533100.29</timestamp>
</run>
**testcase**

```xml
<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.

---

```xml
<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>
</notification>
```

---

```xml
<notification id="214" team-id="34">
  <team>U Waterloo</team>
  <contest-time>132.04</contest-time>
  <timestamp>1298733213.10</timestamp>
  <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>
  </balloon>
</notification>
```
Event_Feed

<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>
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