FLoC Olympic Games 2014

Citius, Maius, Potentius – Faster, Bigger, More Powerful

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OWL Reasoner Evaluation 2014
OWL is a W3C standardised logic-based ontology language based on Description Logics.

ORE 2014 is the 2nd OWL Reasoner Evaluation Competition.

ORE 2014 compares 11 OWL reasoning systems on hundreds of ontologies.

We evaluate different problems (classification, consistency checking, realisation) in two OWL profiles/fragments.
ORE 2014: Classification Example

DL Syntax

\[ A \sqsubseteq \exists r . B \]
\[ B \sqsubseteq \forall r^- . C \]
\[ \models A \sqsubseteq C \]

FOL Syntax

\[ \forall x . [A(x) \rightarrow \exists y . [r(x, y) \land B(y)]] \]
\[ \forall x . [B(x) \rightarrow \forall y . [r(y, x) \rightarrow C(y)]] \]
\[ \models \forall x . [A(x) \rightarrow C(x)] \]

- Reasoners have to compute all subsumptions between concepts/uniary predicates
- Output: all explicitly stated and implicitly following subsumptions
ORE 2014 Award Criteria

- Reasoners ranked according to
  Expected Results / Tasks Attempted

  1st Prize: Konclude with 95.5%
  (Andreas Steigmiller, Thorsten Liebig, Birte Glimm)

  2nd Prize: ELK with 86.4%
  (Yevgeny Kazakov, Markus Krötzsch, František Simančík, Pavel Klinov)

  3rd Prize: MORe with 85.7%
  (Ana Armas Romero, Ernesto Jimenez Ruiz, Bernardo Cuenca Grau, Ian Horrocks, Cristina Feier)
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