

MODEL SANITIZATION

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May 21, 2015

PROBLEM STATEMENT

- To encourage collaboration between industrial, research, and tool partners, models that contain intellectual property (IP) may need to be shared for experimentation or analysis

Challenges:

- Models contain IP information that is structured/unstructured, but must be removed
- Models may be extremely large. However, size/complexity are desirable to researchers/tool builders
- Sanitization procedure must be verifiable and 'obviously correct'

(PROPOSED) SOLUTION

- Define the intellectual property to be removed as a set of model queries
- For example, removing all names of elements
 - Query would be 'the set of all model element names'
 - Q1: Answer to query on original model
 - Q2: Answer to query on sanitized model
 - The sanitization is correct if there are no common elements between Q1 and Q2

(PROPOSED) TOOL

- Objective is to produce open-source Eclipse plugin
- Framework to allow user to select which information to be removed from the model
 - Integrate query language and provide sanitization templates
- Reports on sanitization correctness/verification
- Collaboration with Yimeng “Jacques” Zhu
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