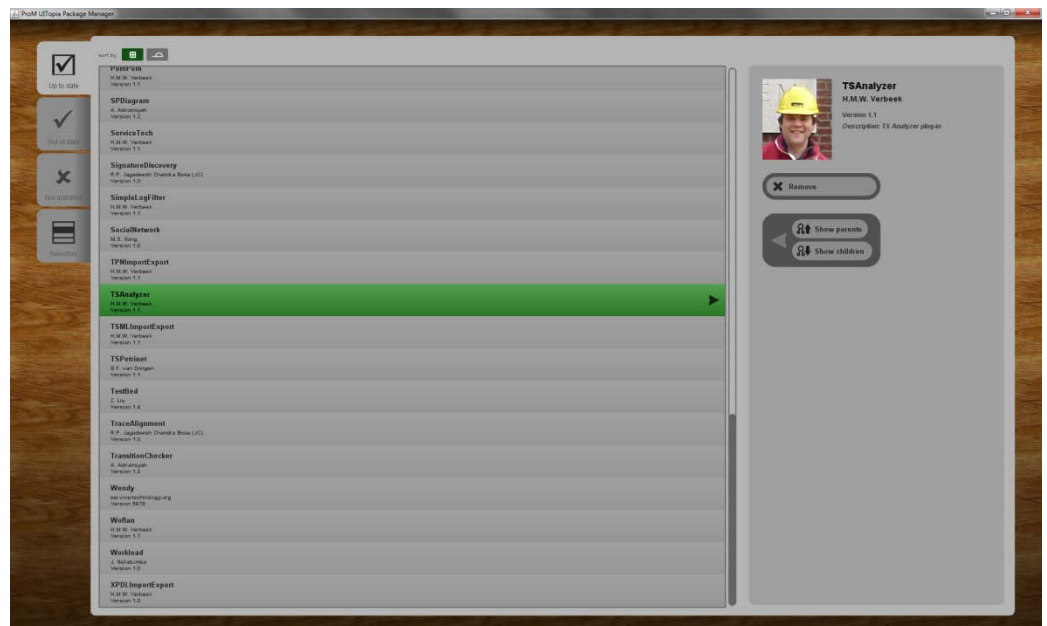


# TSAnalyzer



8/10/2010

H.M.W. Verbeek

The XPDImportExport contains basic support for the XPD (2.1) file format: A plug-in that imports a BPMN diagram from such a file.

# TSAAnalyzer

H.M.W. VERBEEK

## PACKAGES

### Requires

- TSMiner

### Required by

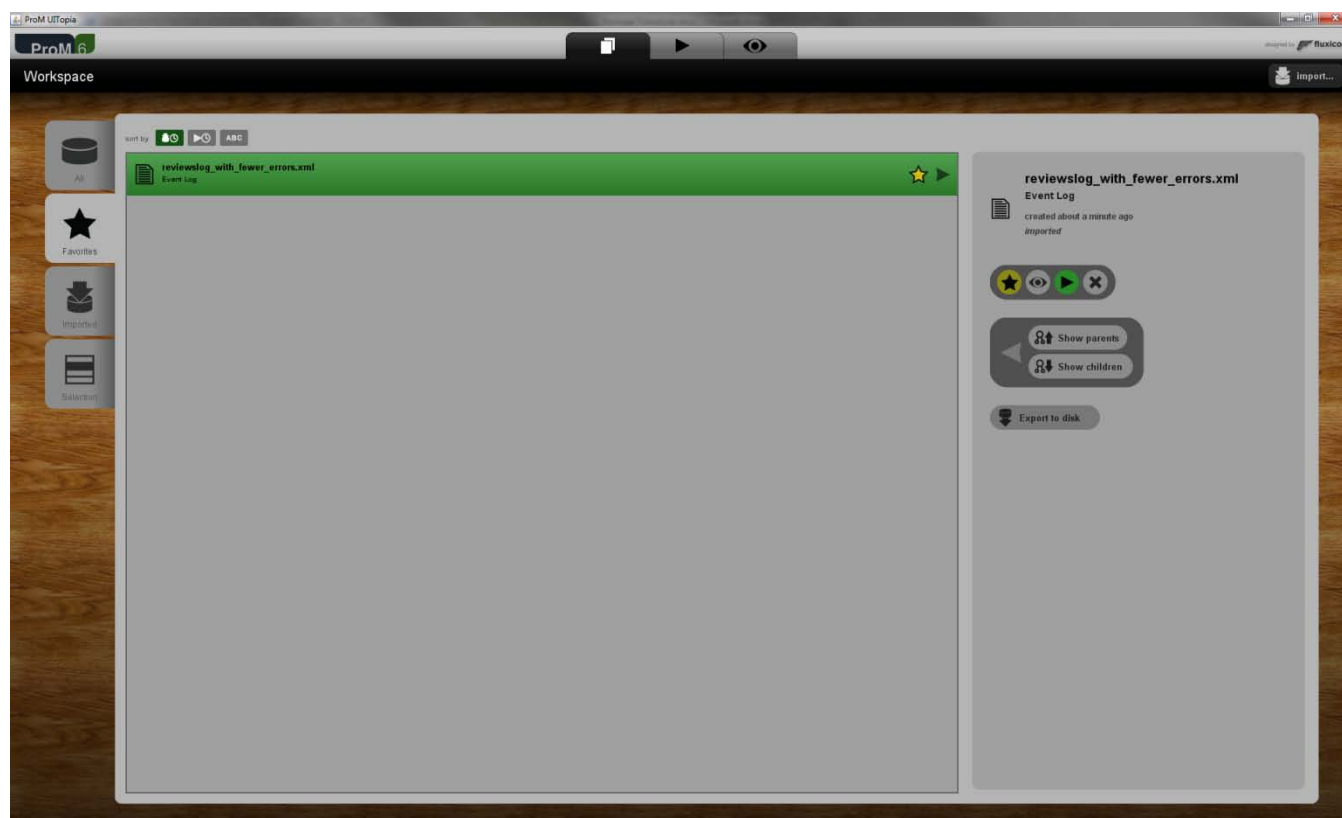
- ATPN2010
- BPM2010

## PLUG-INS

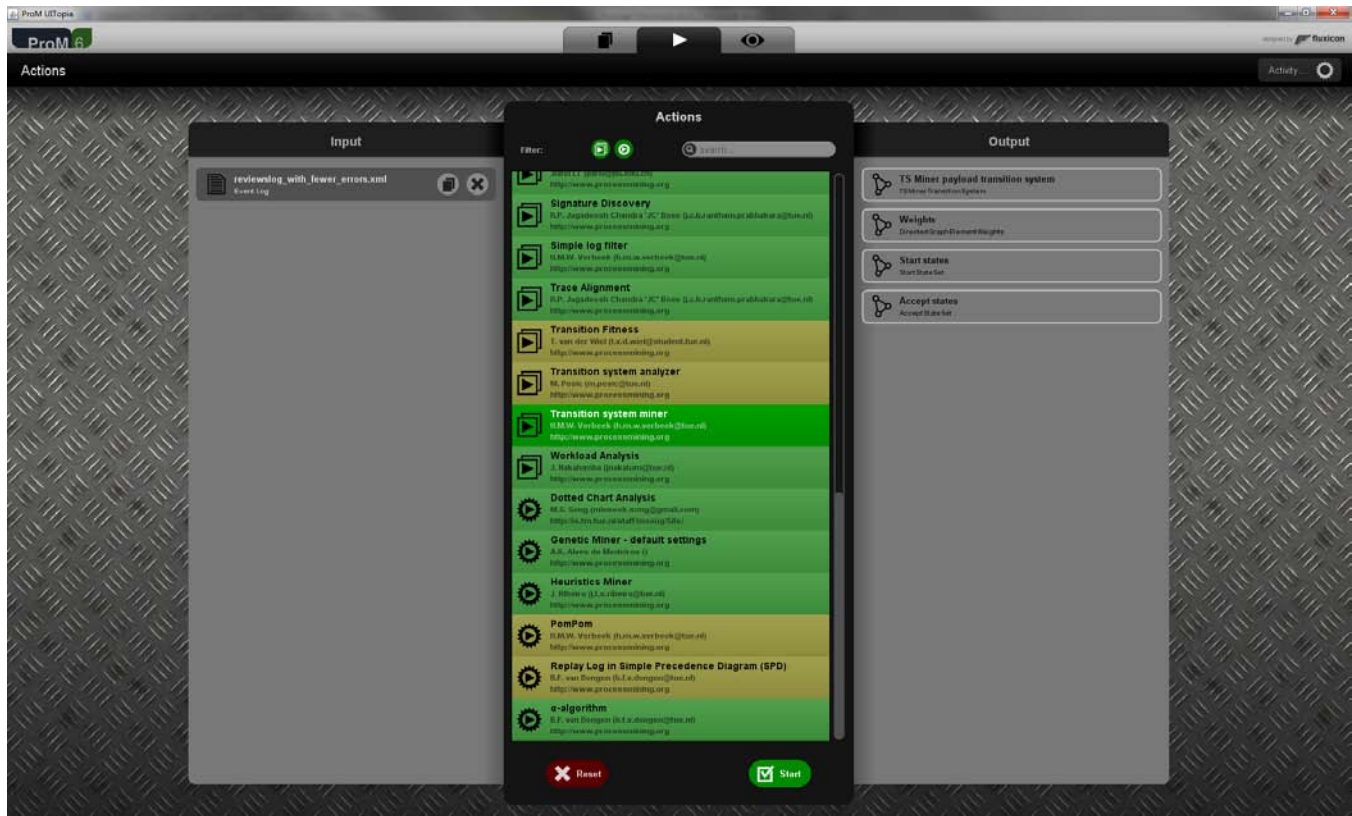
- Transition system analyzer
- Transition system annotation visualization
- Operational Support Annotation Provider

## TRANSITION SYSTEM ANALYZER PLUG-IN

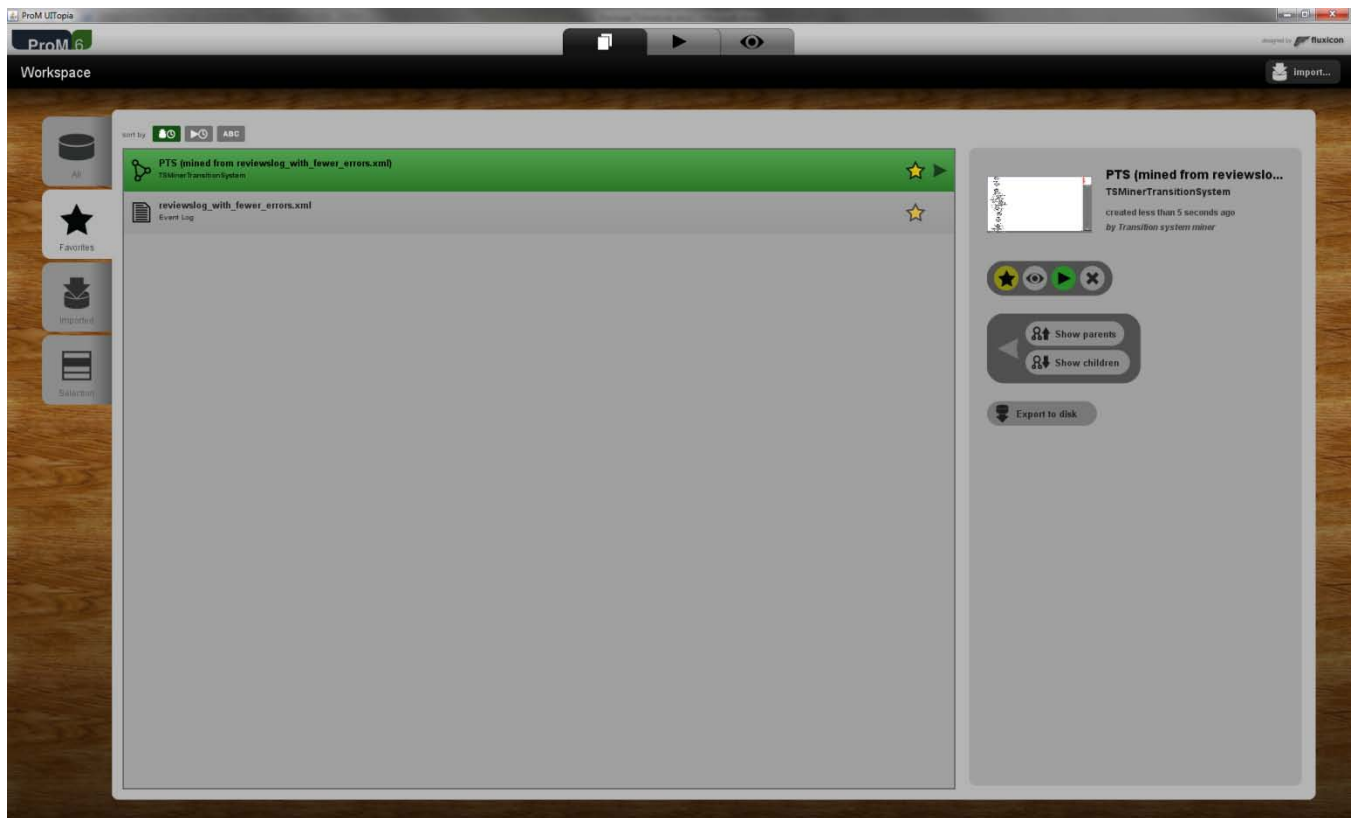
### Starting the Transition system analyzer plug-in



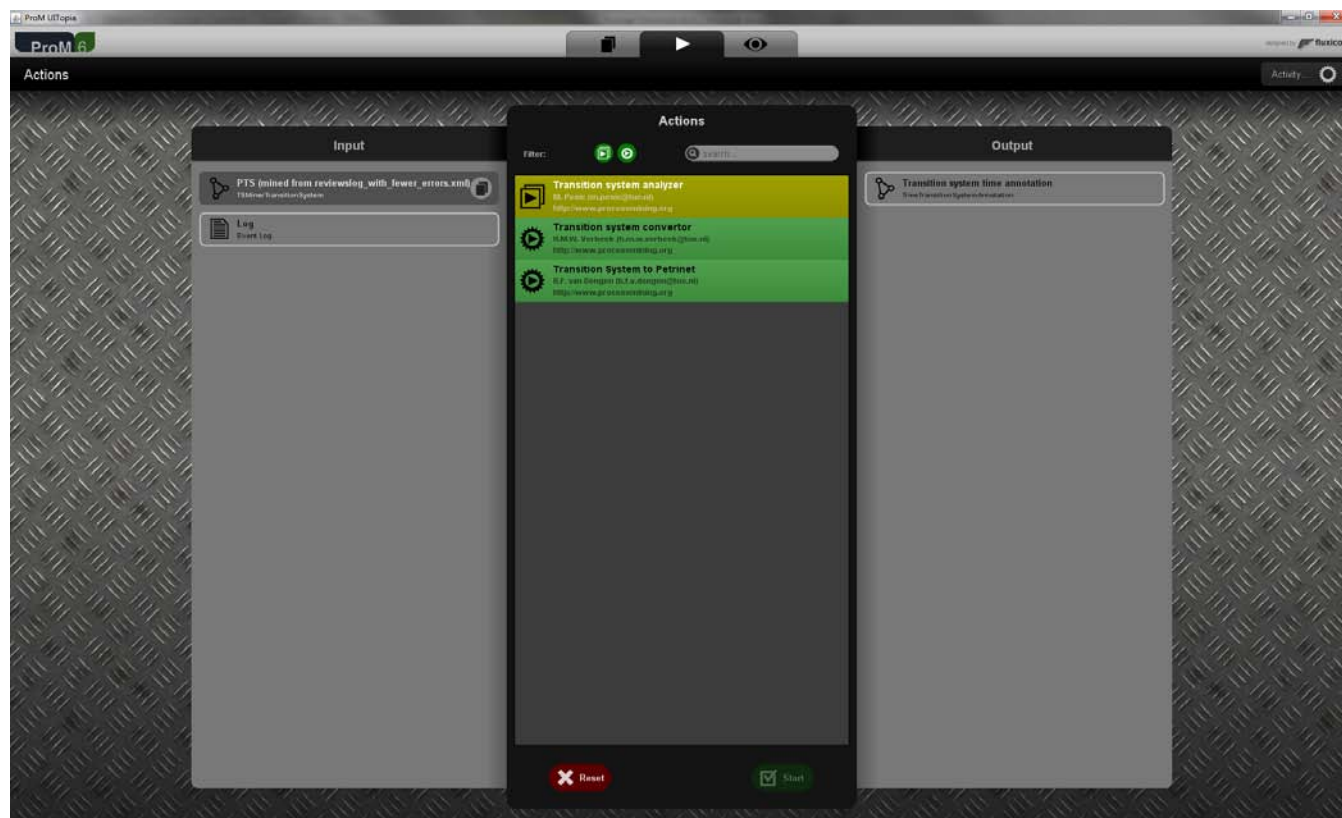
Select an event log and select the “Action” button.



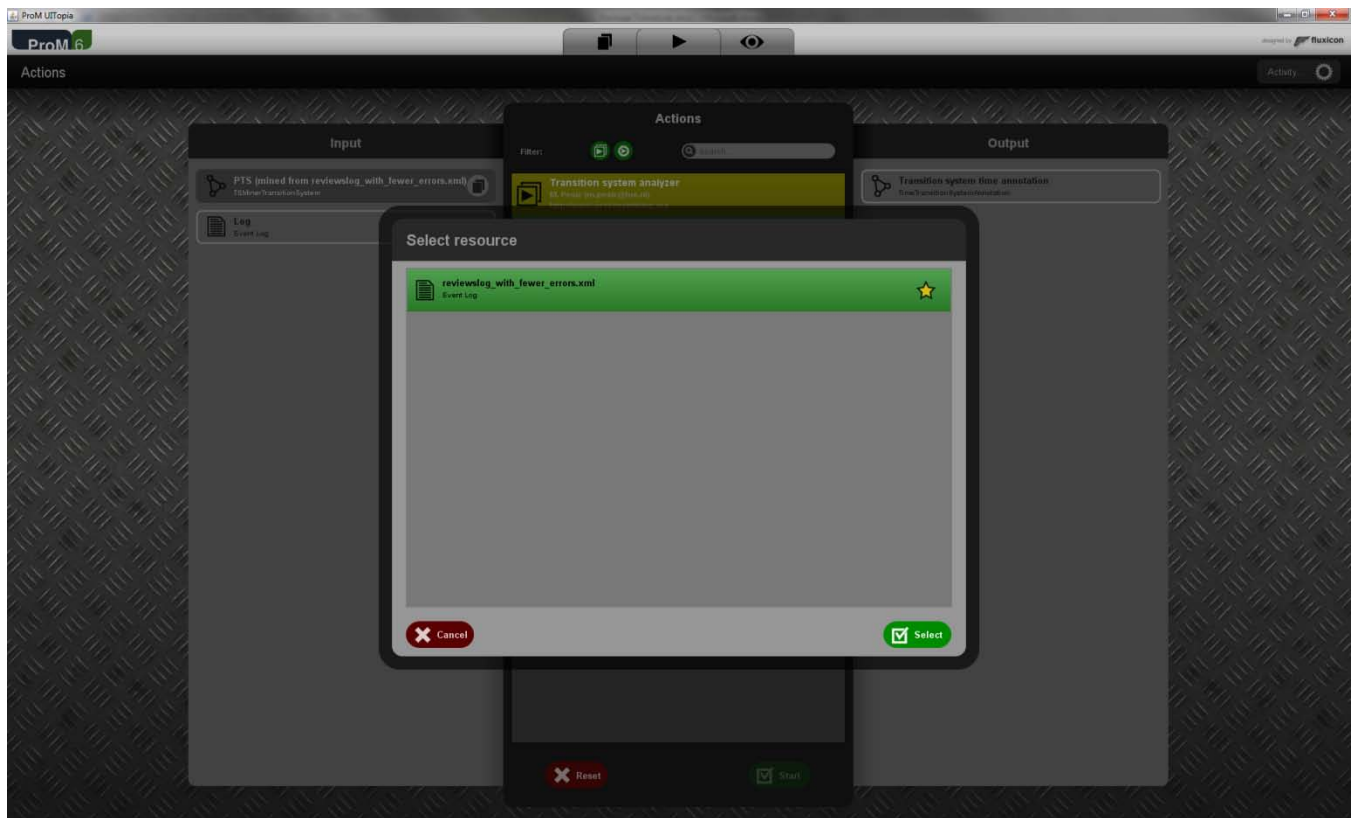
Select “Transition system miner” and select “Start”. The wizard for the Transition system miner appears. Configure the settings for this miner using this wizard (see also the documentation for the TSMiner package), and select “Finish” at the end.



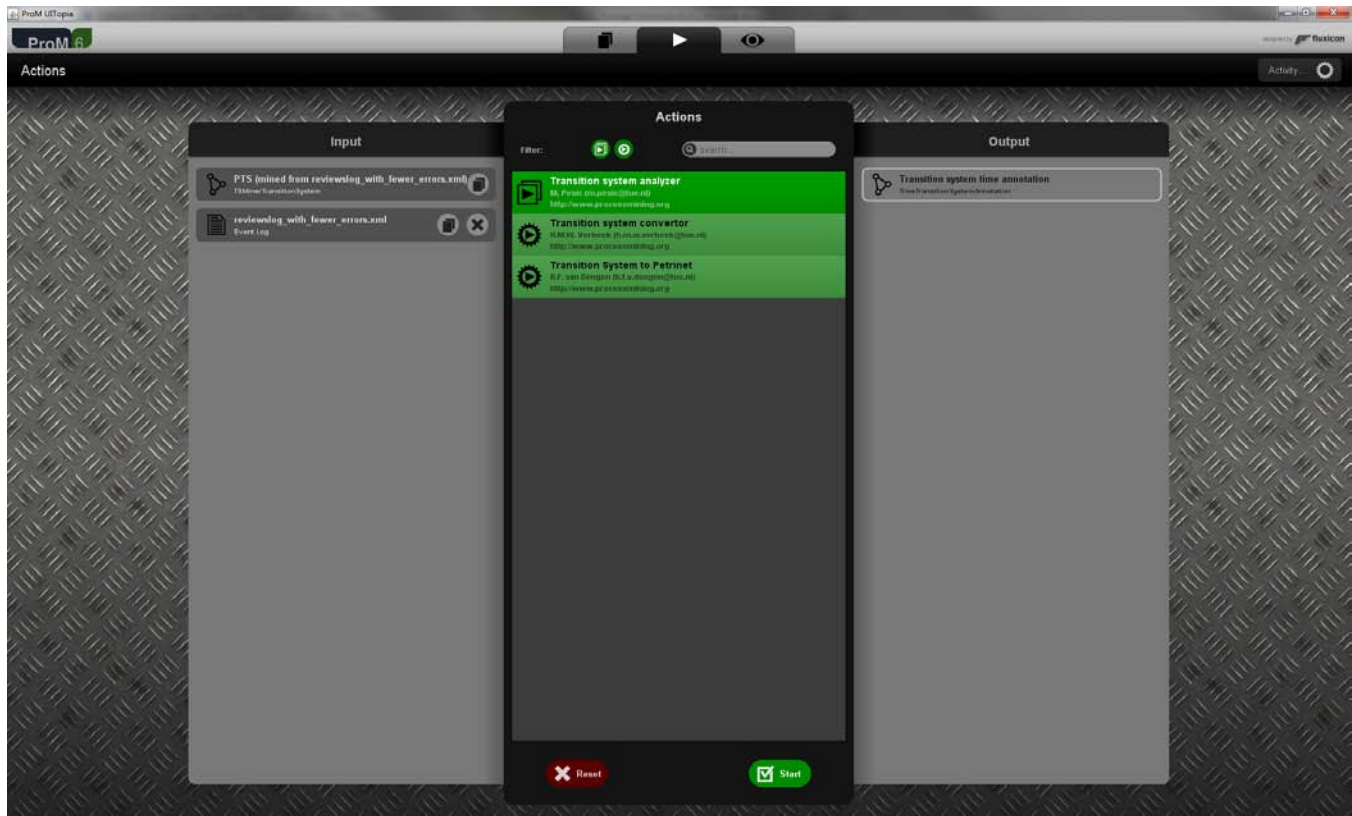
Select the mined transition system and select the “Action” button.



Select “Transition system analyzer” and select the “Log” input.

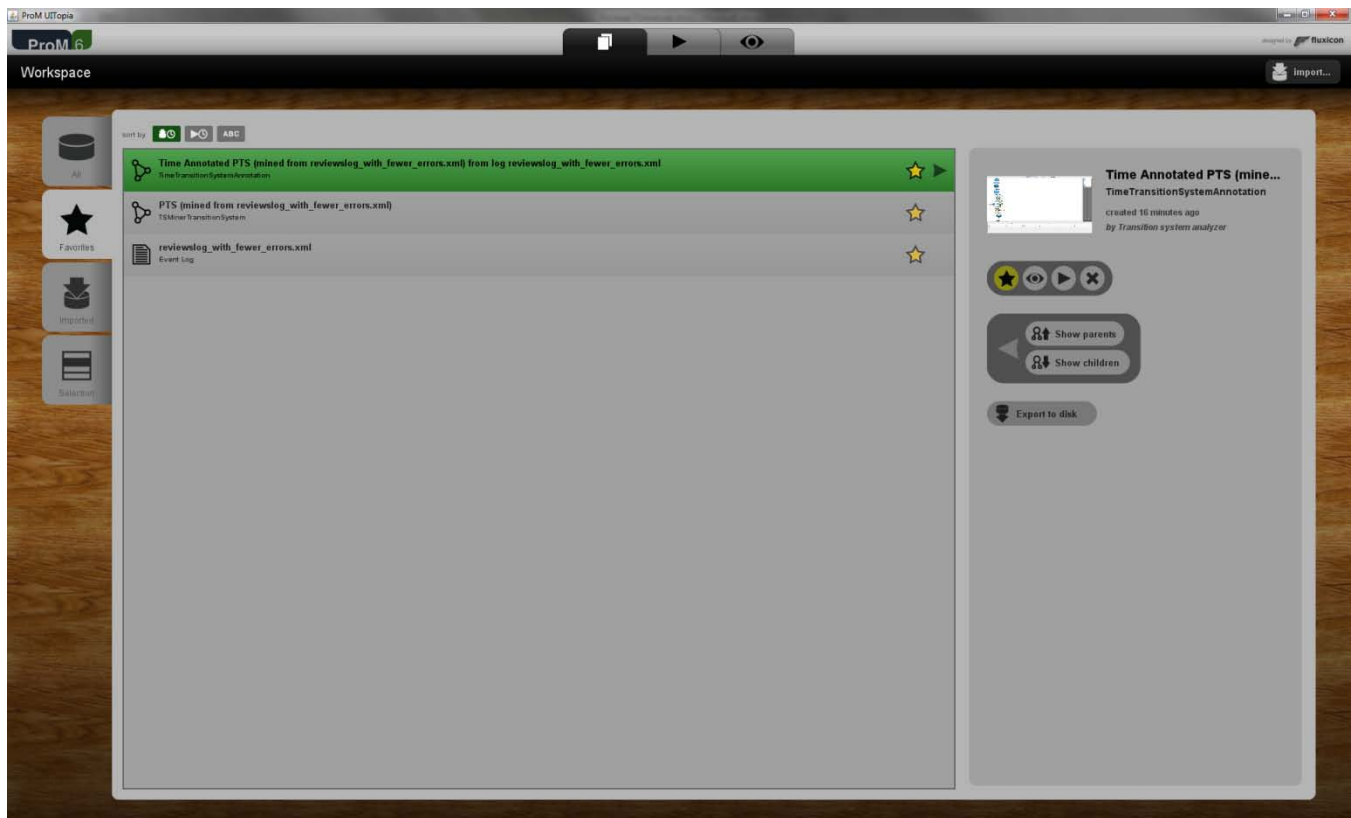


Select the event log that you used to mine the transition system from and select “Select”.



Select "Start".

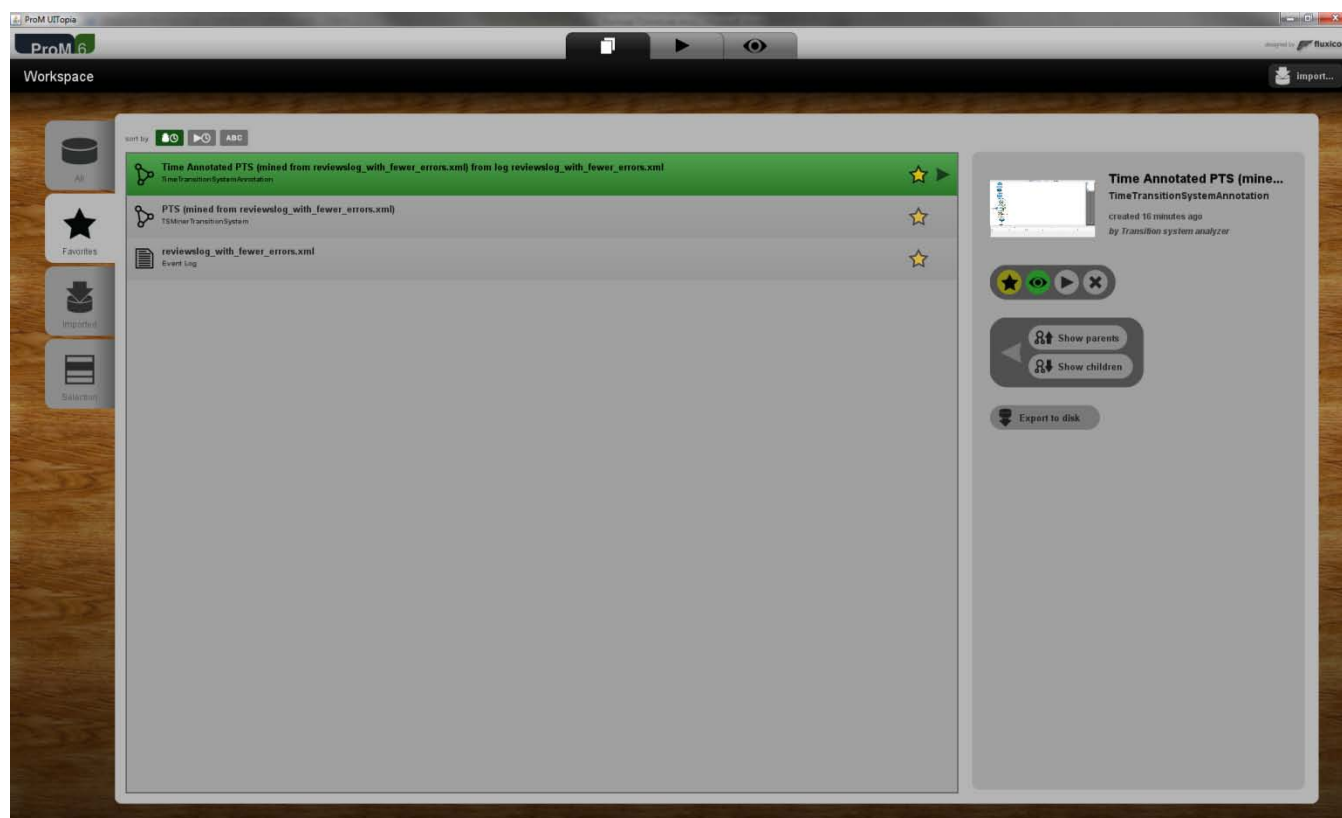




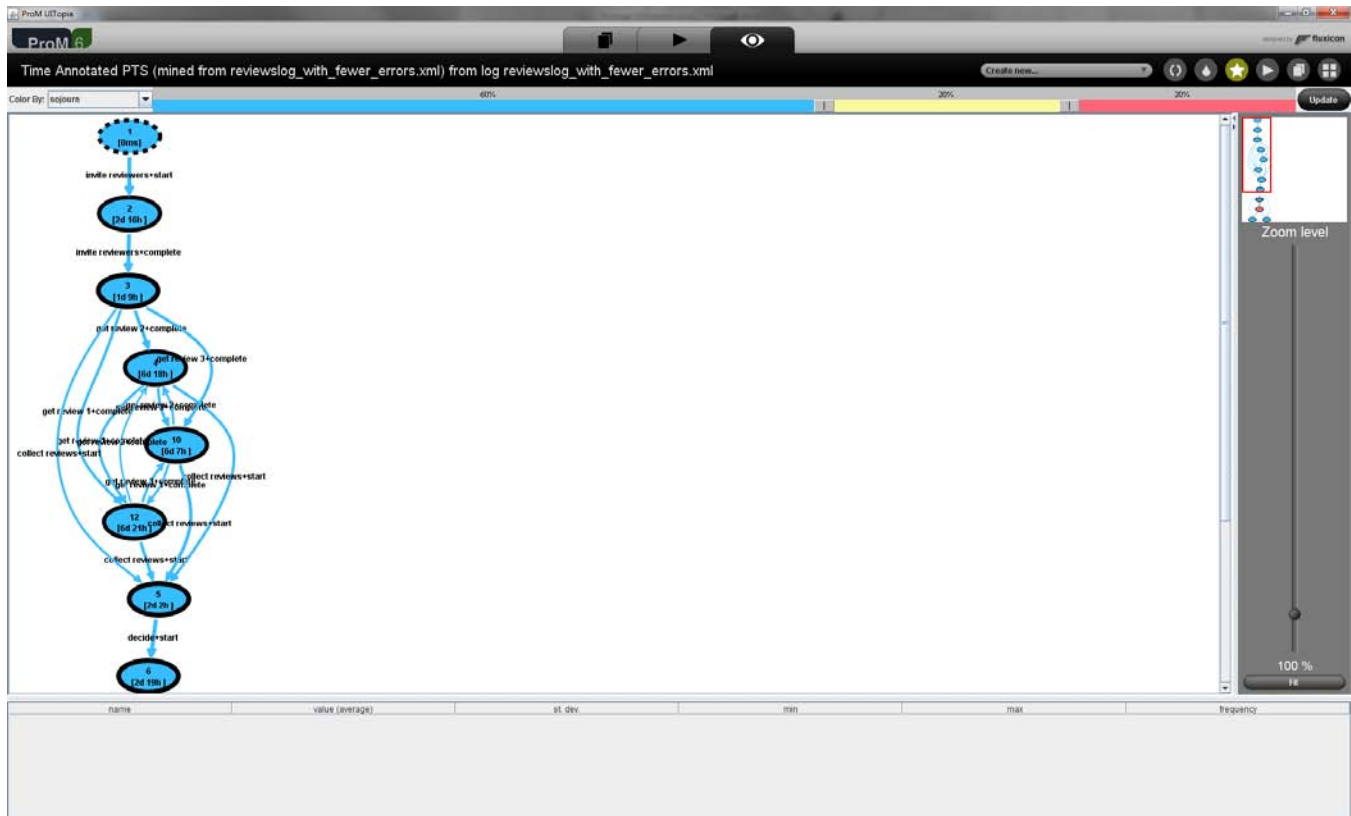
The Transition system analyzer has annotated the mined transition system with time data, which can be visualized by the Transition system annotation visualization plug-in.

## TRANSITION SYSTEM ANNOTATION VISUALIZATION PLUG-IN

### Starting the Transition system annotation visualization plug-in



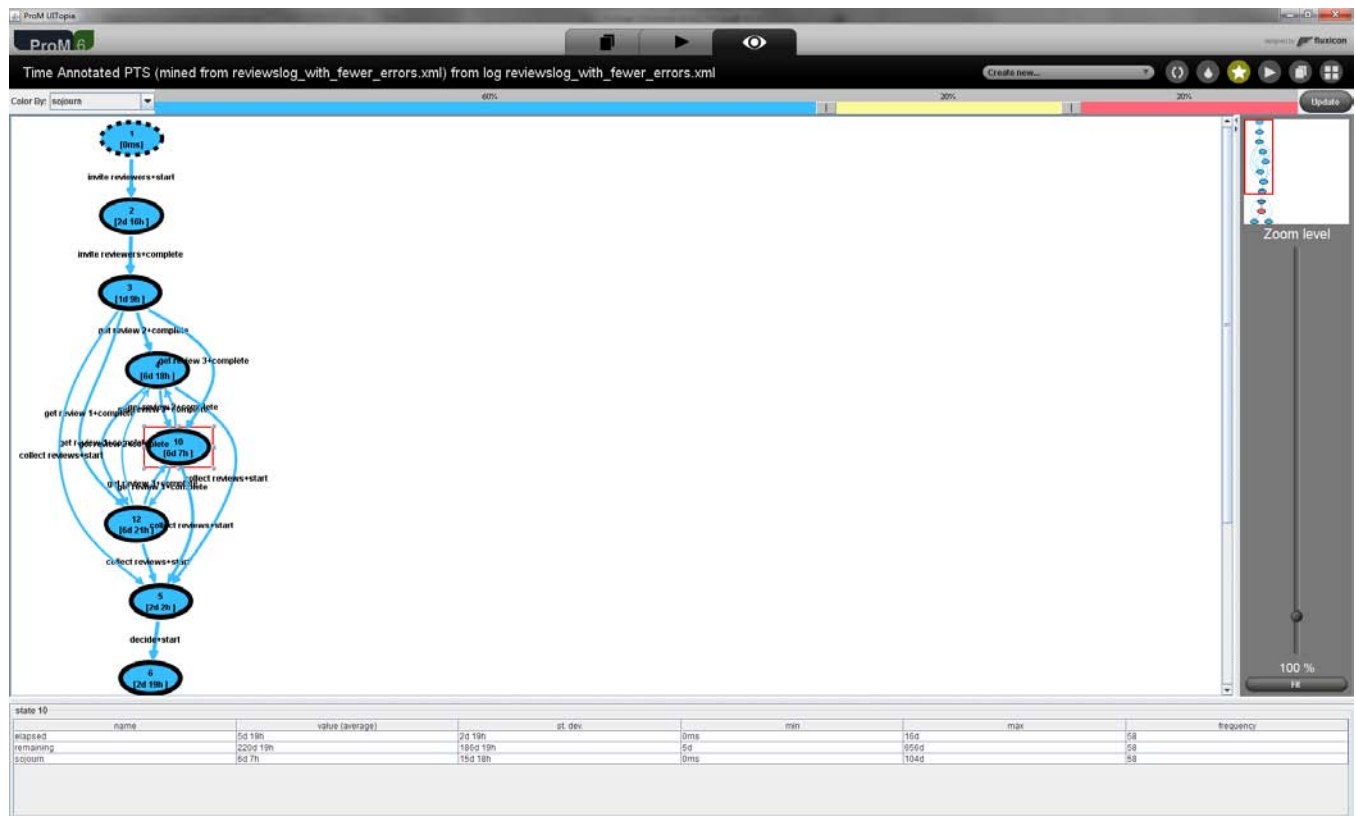
Select a TimeTransitionSystemAnnotation and select the “Visualize” button.



The transition system will be shown, where the states and transitions have been colored to show how good or bad their times is. Good times yield a blue color, bad times a red color, and regular times a yellow color. Whether a time is considered to be bad, regular, or good can be influenced by the triple slider on top. In case of the example shown above:

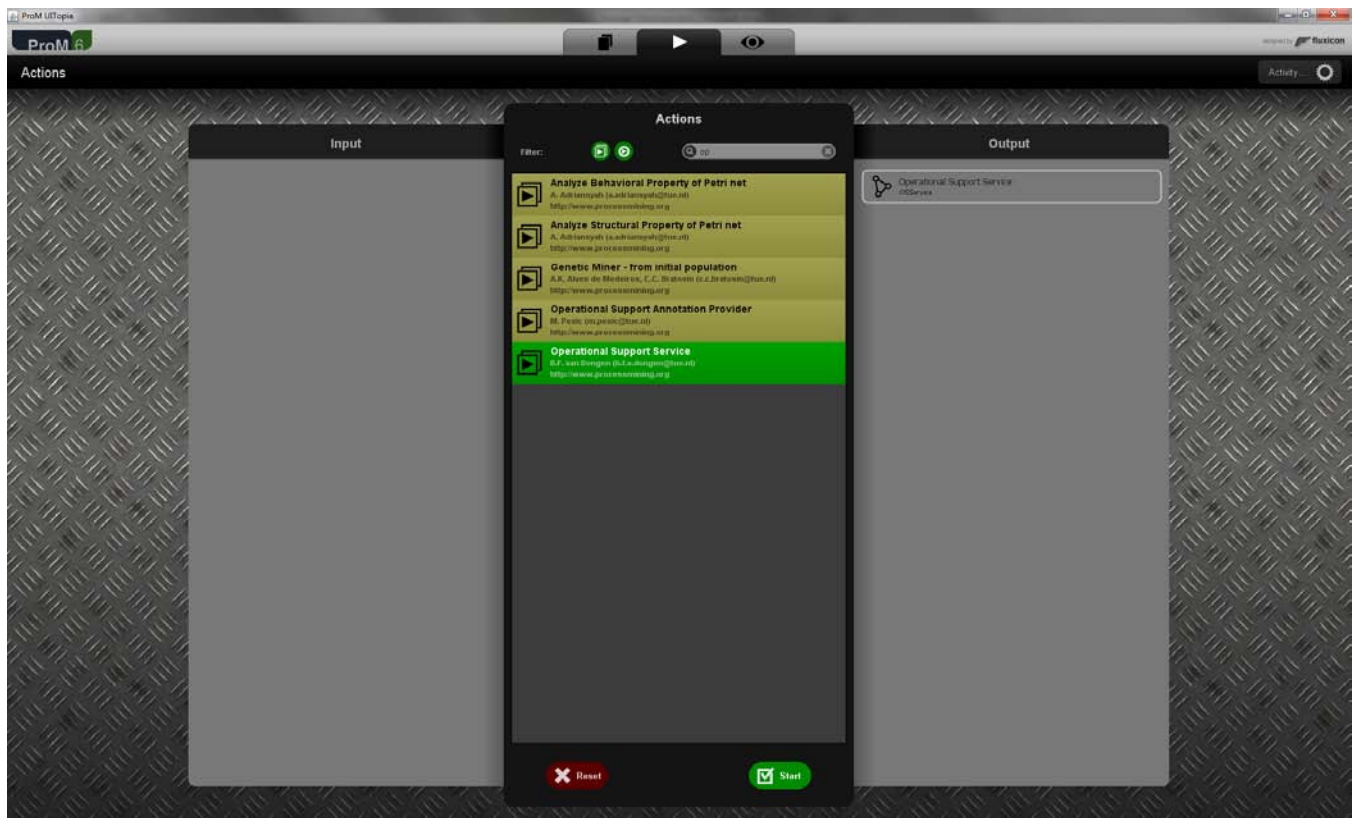
- States:
  - If the state time is less than 60% of the maximal state time, then the state is colored blue.
  - Else, if the state is less than 80% of the maximal state time, then the state is colored yellow.
  - Else, the state is colored red.
- Edges:
  - If the edge time is less than 60% of the maximal edge time, then the edge is colored blue.
  - Else, if the edge is less than 80% of the maximal state time, then the edge is colored yellow.
  - Else, the edge is colored red.

If a state or transition is selected, its times will be shown at the bottom.

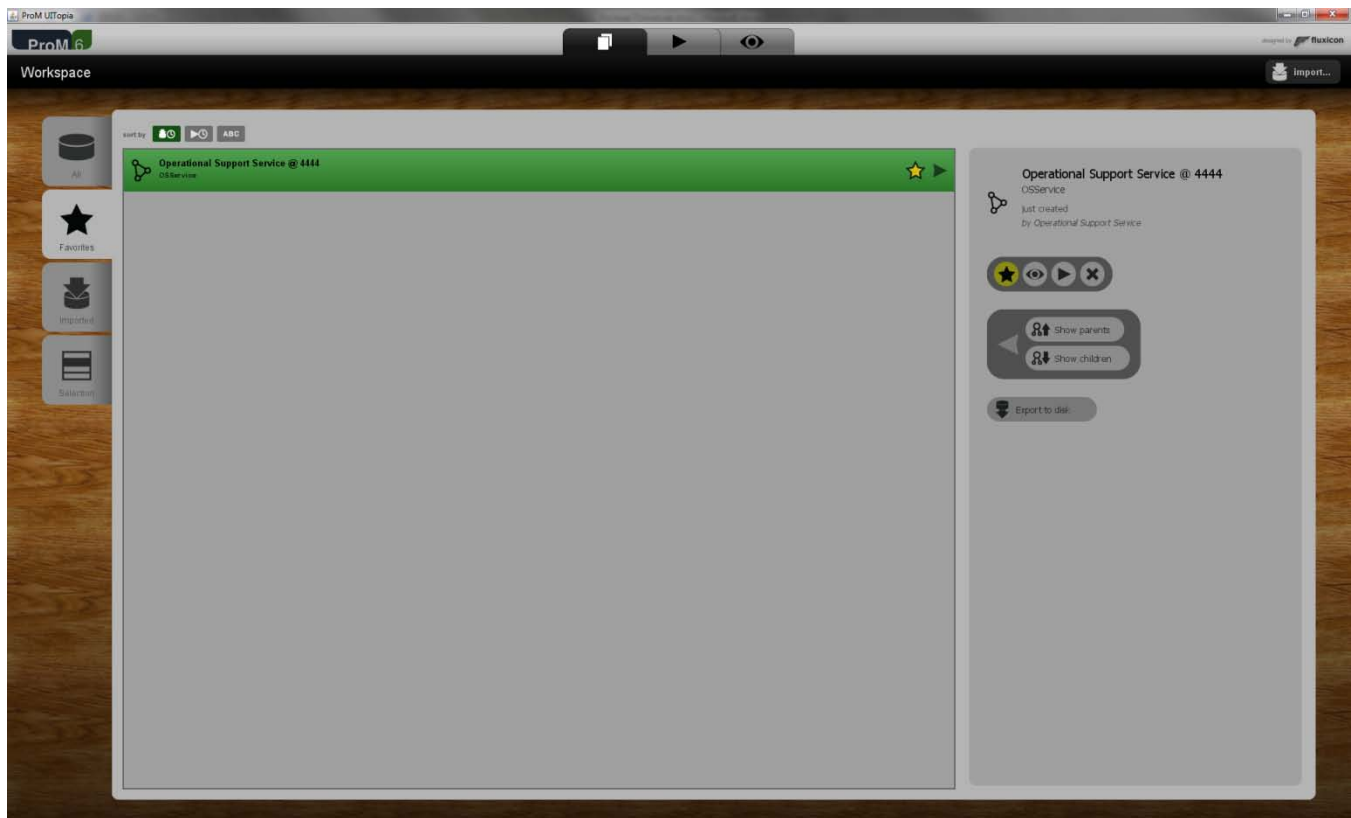


## OPERATIONAL SUPPORT ANNOTATION PROVIDER PLUG-IN

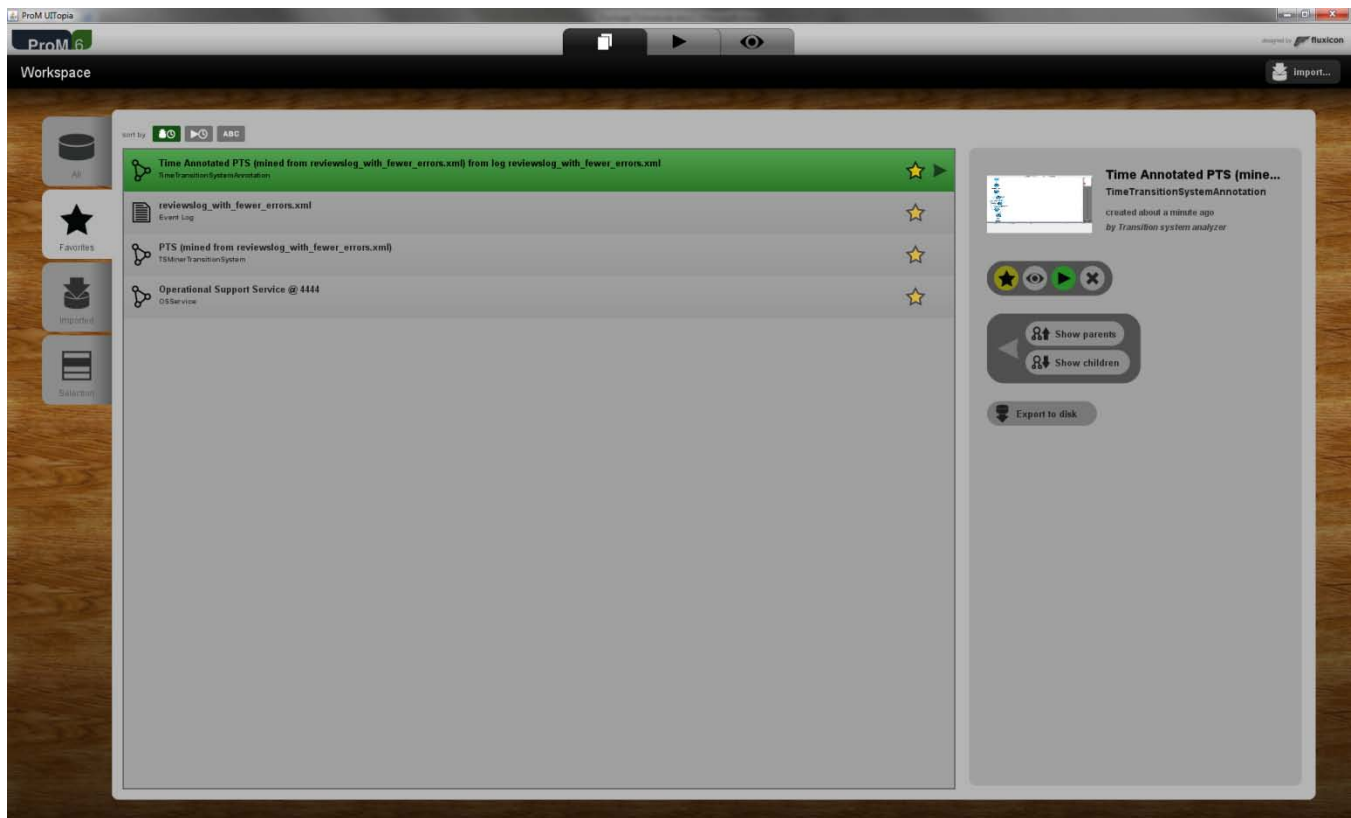
### Starting the Operational Support Annotation Provider plug-in



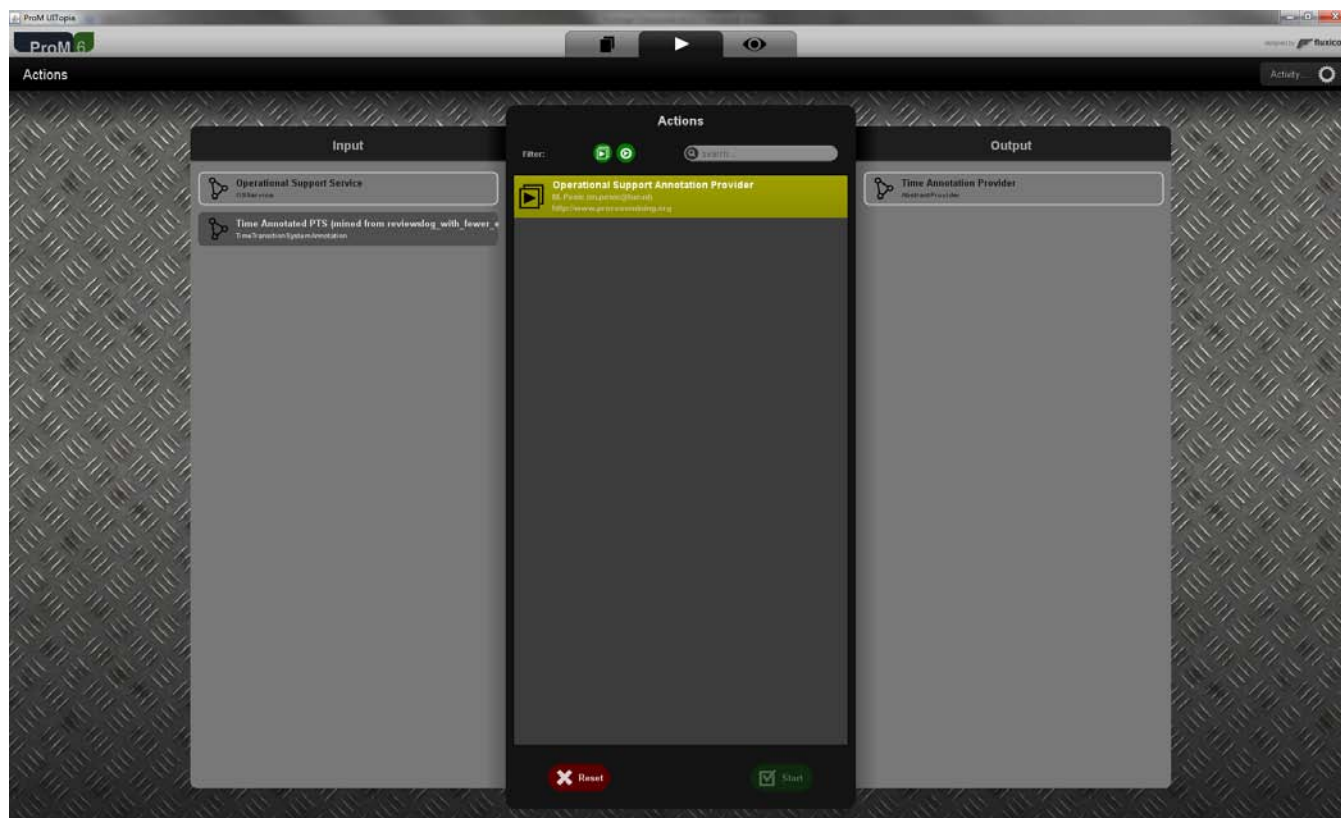
Select the “Operation Support Service” and select “Start”. If any firewall complains, allow the service access.



Import an event log, mine a transition system from that log, and annotate it with times as described in the previous Sections. At the end, you should have a `TimeTransitionSystemAnnotation` as shown by the next screenshot.

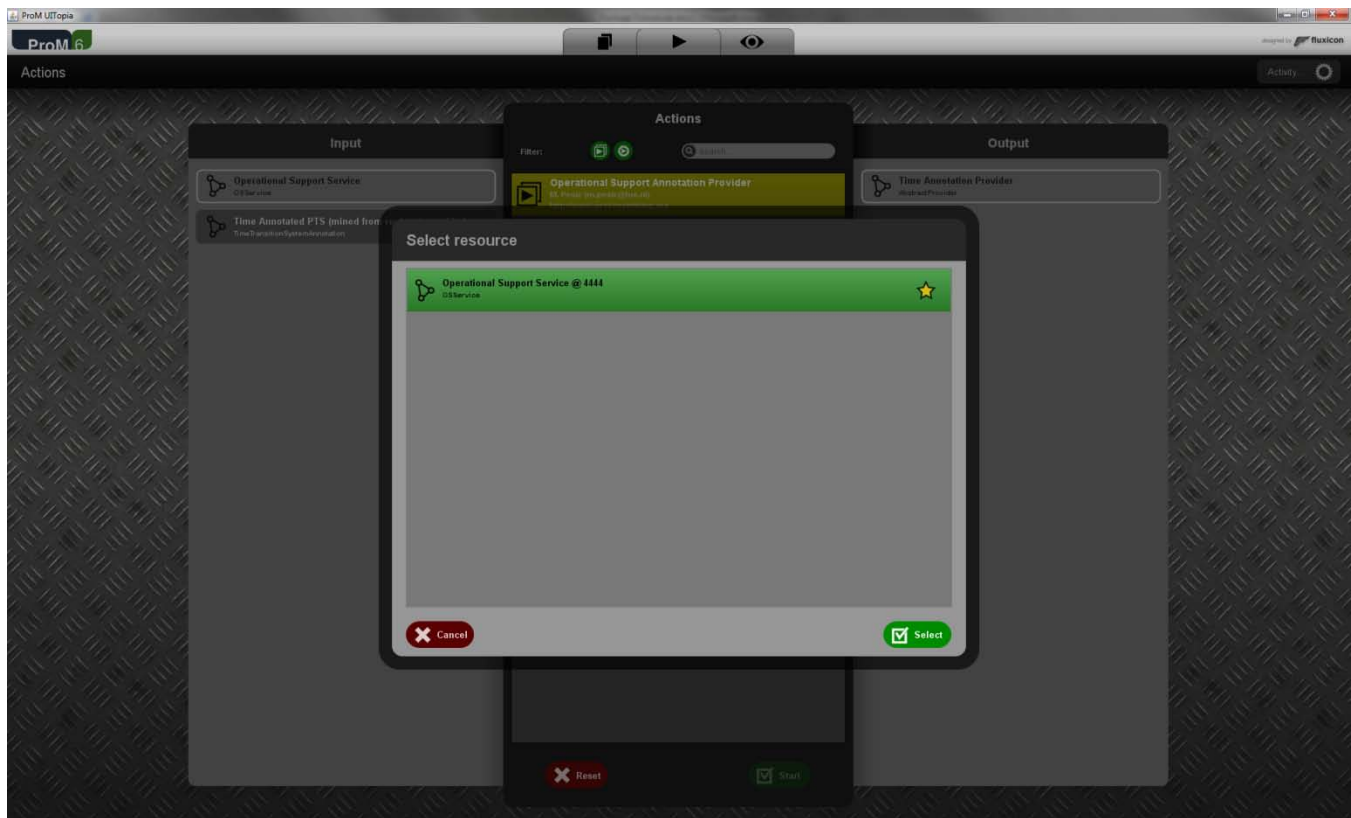


Select the TimeTransitionSystemAnnotation and select the “Action” button.

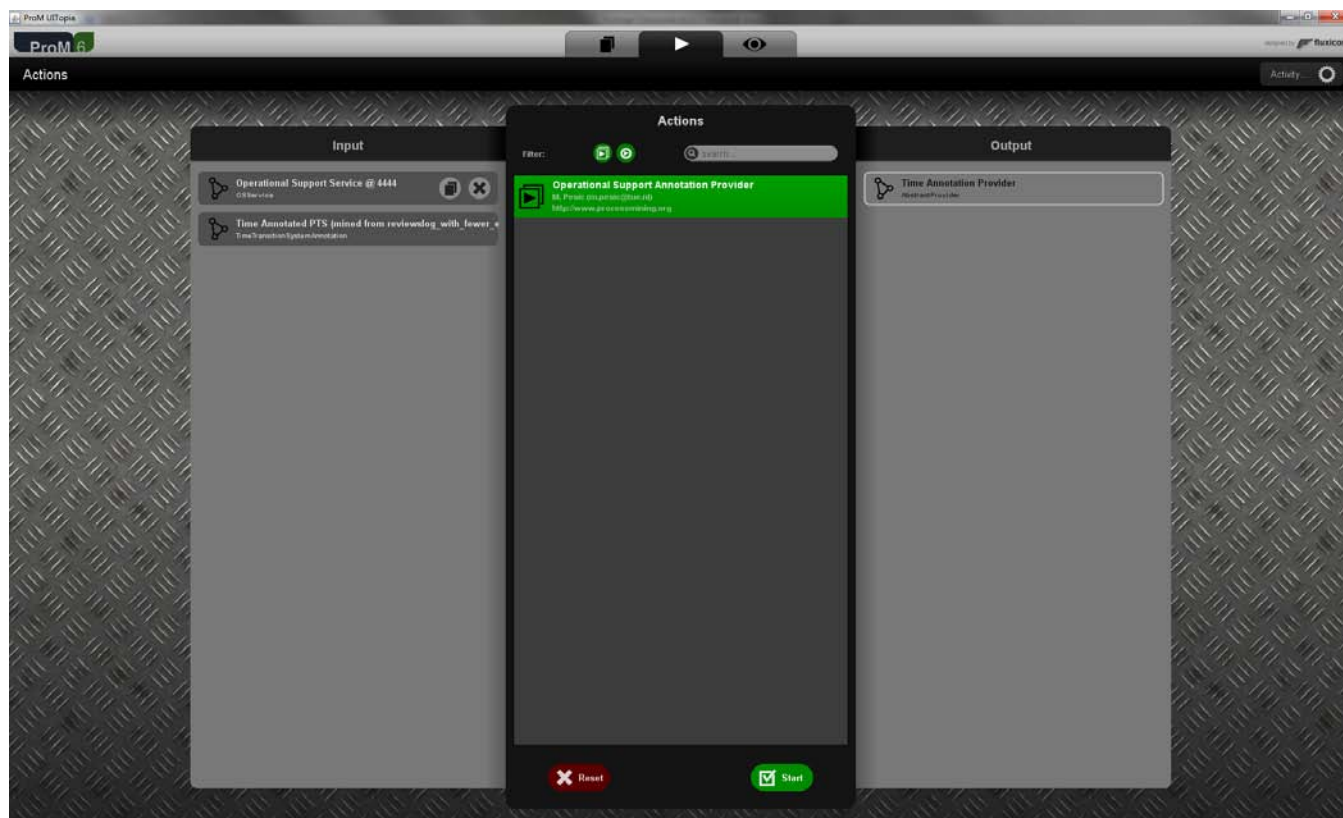


Select “Operation Support Annotation Provider” and select the “Operational Support Service” input.

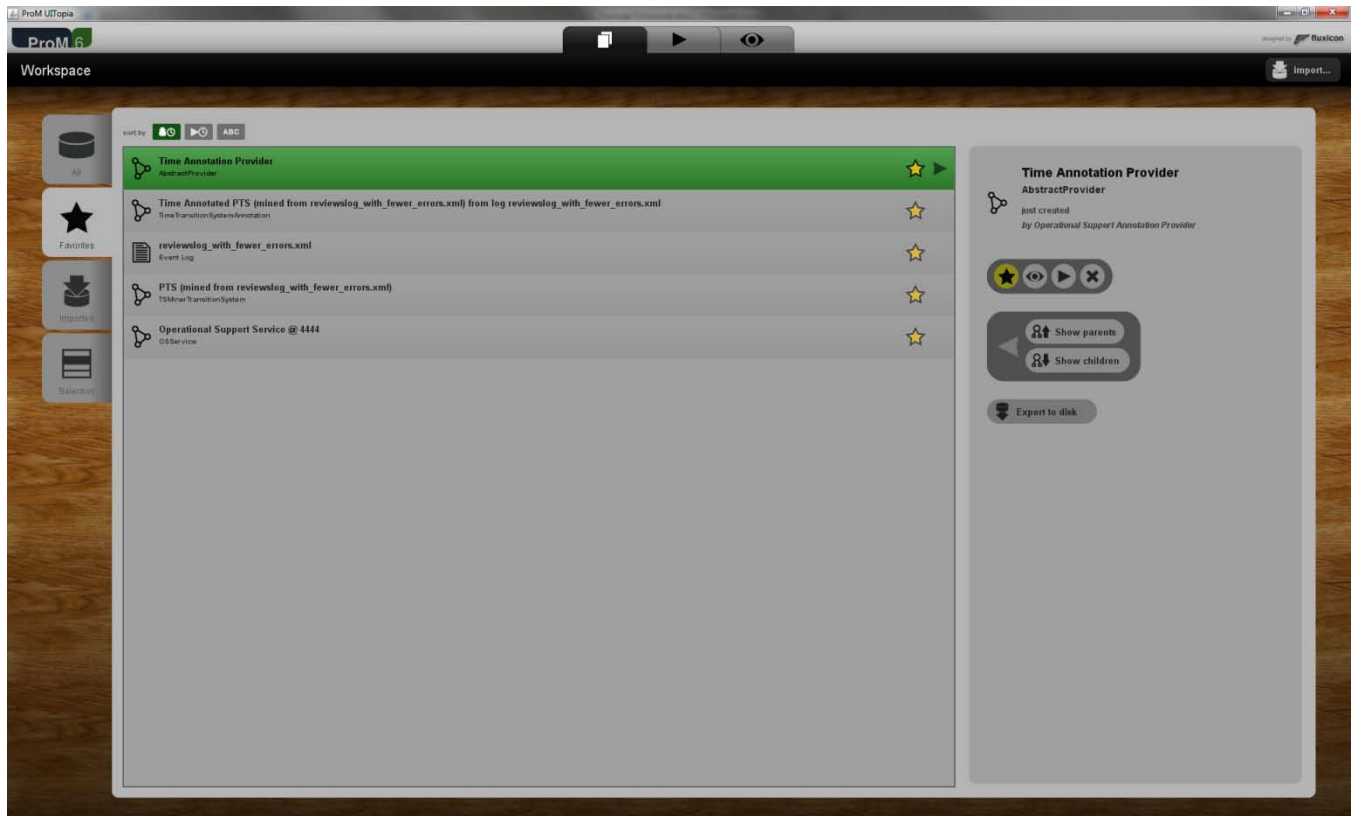




Select the running Operational Support Service and select “Select”.



Select "Start".



Now, of course, you need some application to talk to this service...

## VERSIONS

### 1.2

Fixed #116 and #117.

- #116: The state information pane now only takes 20% of the space.
- #117: Used a triple slider to make this more intuitive.

### 1.1

Updated to changes in framework

### 1.0

Initial version.