Tutorial 3 – Usage of the Split-Screen View

In this tutorial, we will use the split-screen view of travis. With the split-screen view, you can visualize the relation between a Petri net and a transition system, either if the Petri net was synthesized from the transition system or the transition system is the reachability graph of the Petri net.

When you click on a state of the transition system, the related marking is depicted in the Petri net and when you click on a place of the Petri net, the related minimal region is depicted in the transition system.
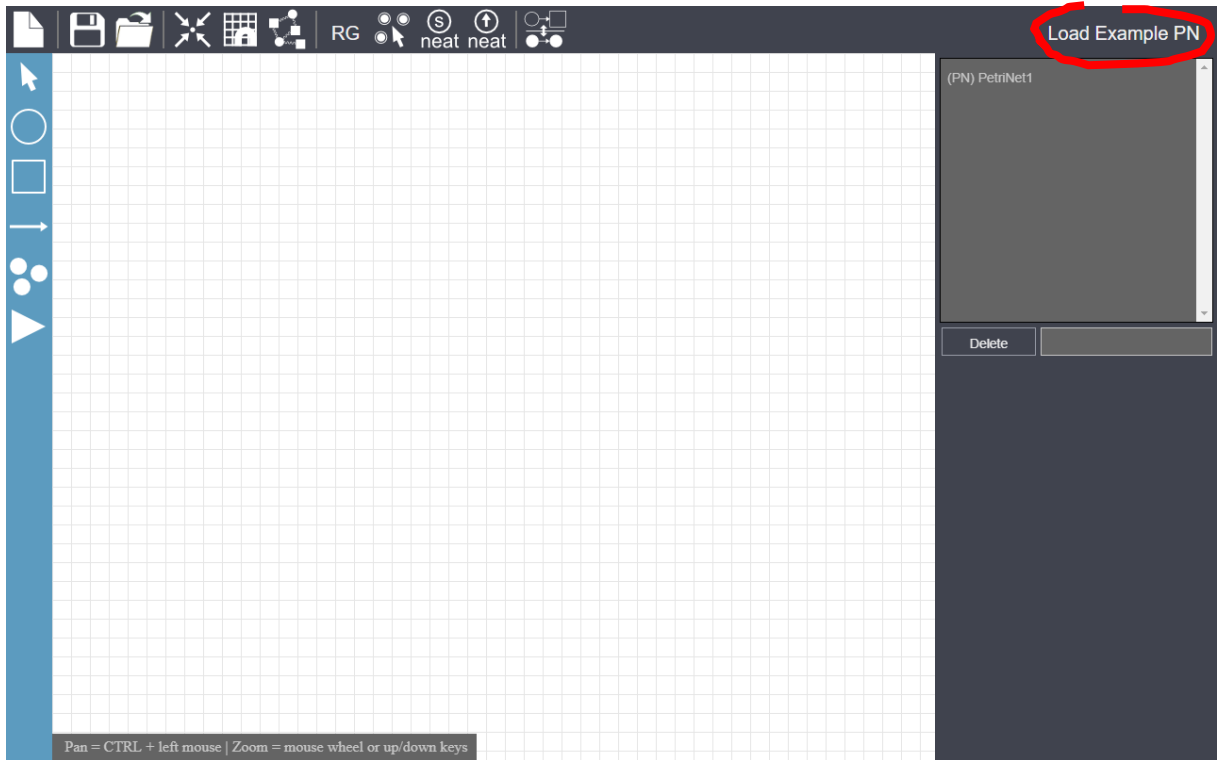
Step 1

Start *travis* via: http://www.fernuni-hagen.de/sttp/travis/travis.html

Step 2

From the start window, choose "Create Petri Net" to create a new empty Petri net.
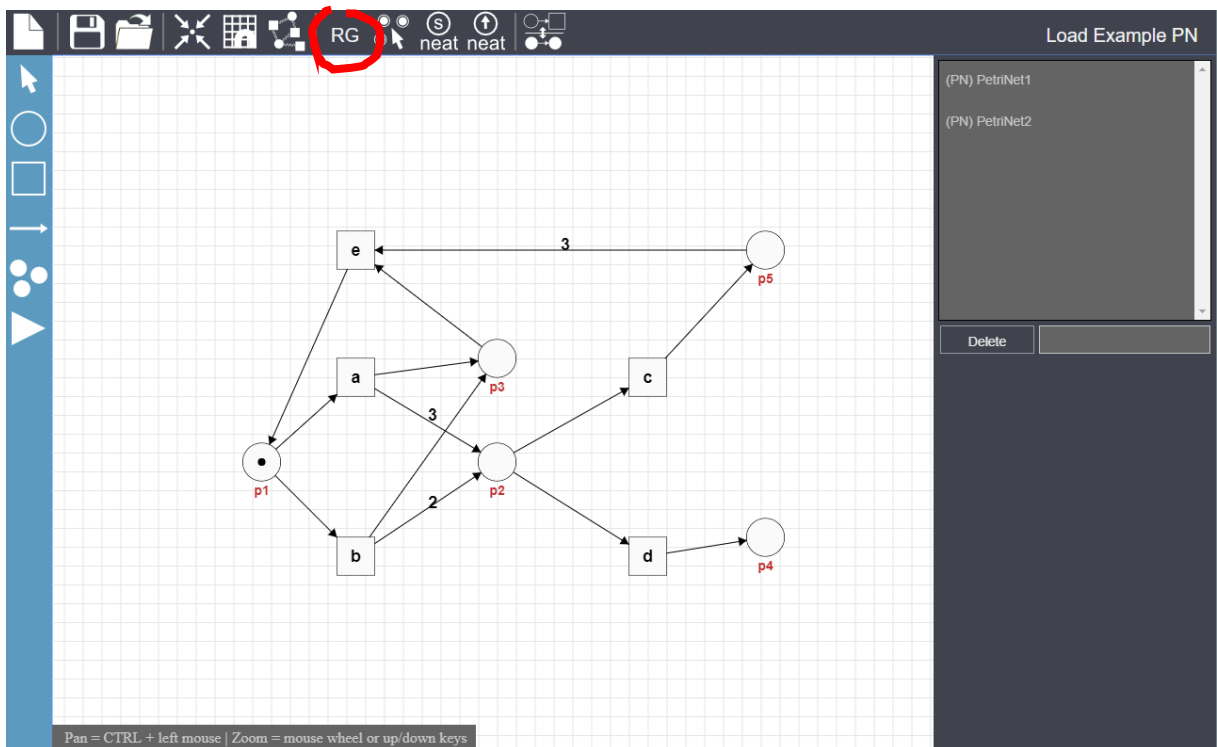

Step 3

We are now in the Petri net editor. We will load an example Petri net by clicking on the "Load Example PN" button in the upper right corner of the Petri net editor.
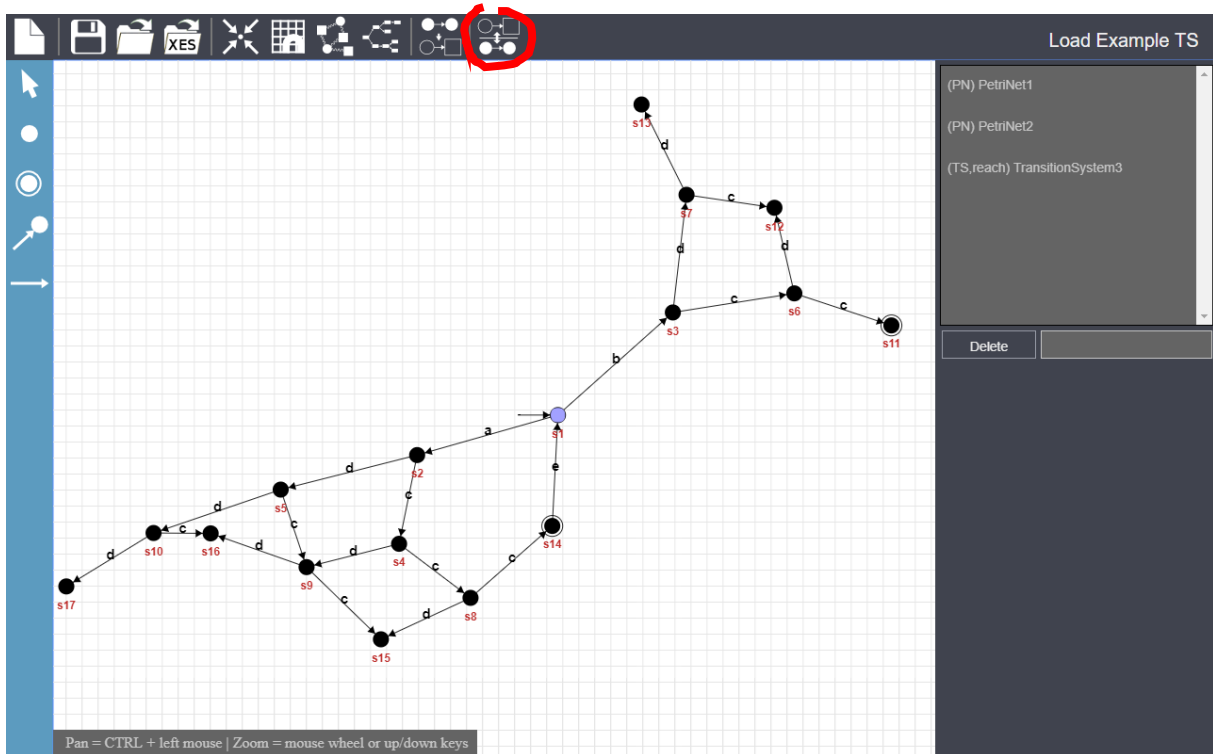
Step 4

In the next step, we calculate the reachability graph of the Petri net.

Step 5

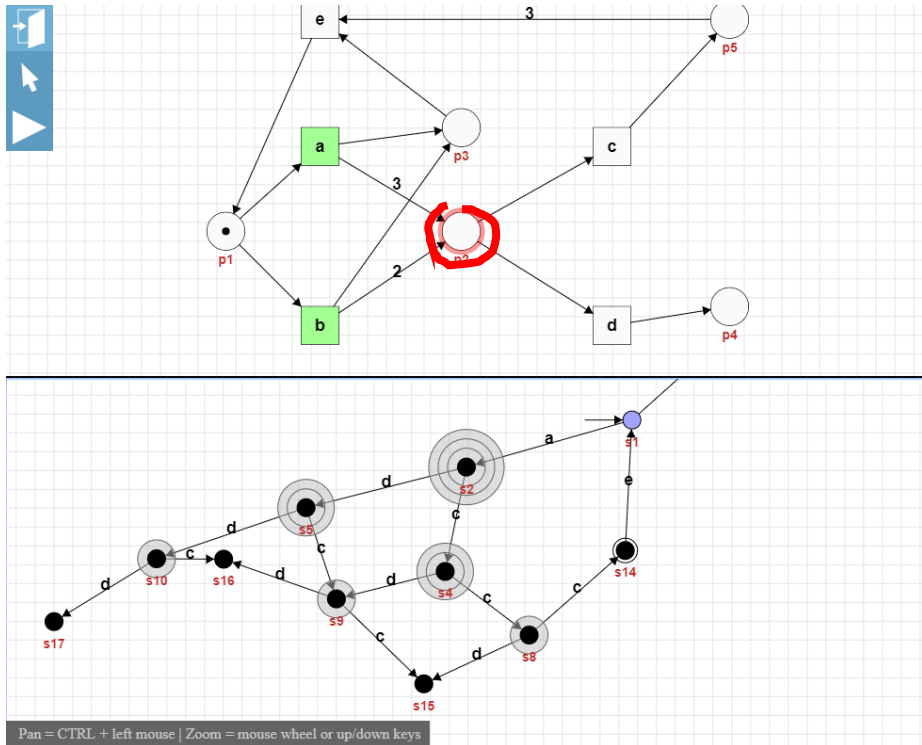Now, open the split-screen view by clicking on the depicted button.

Step 6

Travis switches to the split-screen view. Please note that travis only can open the split-screen view, if the input Petri net or the output reachability graph were not edited (except from moving nodes around).

Step 7

Now you can either click on a place (e.g. the depicted one) in the Petri net to show its related minimal region in the transition system or click on a state of the transition system to show the related marking in the Petri net.

Step 8

You can also use the split-screen view, synthesizing a Petri net from a transition system instead of calculating a reachability graph. Switch to the transition system editor, load an example transition system, by clicking on the upper right button of the editor, Click the "synthesize a Petri net" button, choose a bound of 3 and synthesize the net. Now you can also open the split-screen view to visualize markings and minimal regions.