

CTMC Help

Navigating the sections of this program

1. The entire program is divided into two major tabs with a navigation drawer. Each of the major tabs consist of five other sections. These sections are rate, finite graph, Availability and downtime tabs and control section which contains the three major buttons, namely the 2Dplot, 3Dplot and the clear buttons. The Availability and downtime tabs also contain a table and plot section.

In order to access these sections, click either RPDE or Pools tabs to generate data for the availability and downtime data for either of the tabs.

The navigation drawer contains four major items: the “save”, “load”, “help” and “quit” items. The navigation drawer can be accessed by clicking on the hamburger icon at the top right corner of the window.

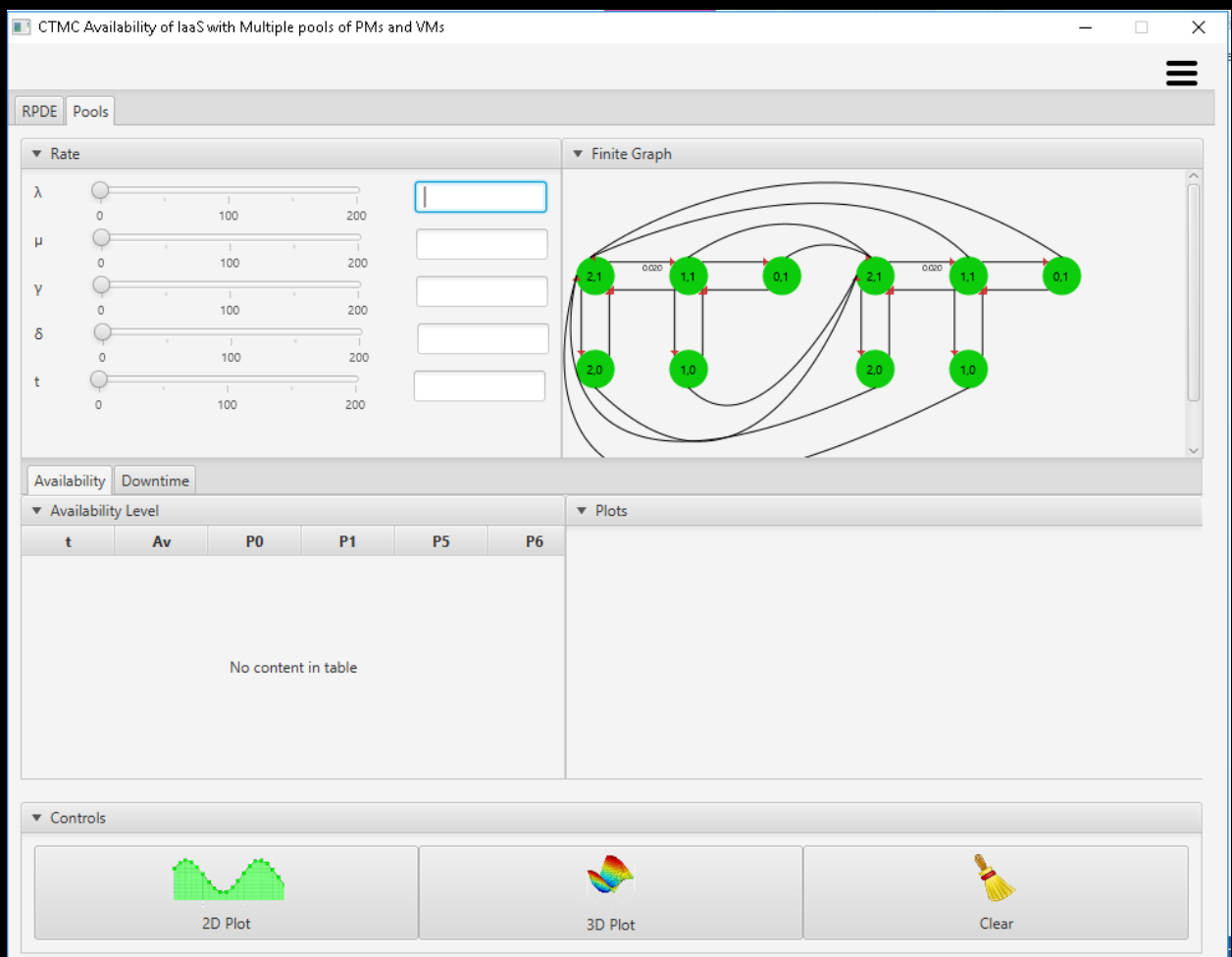


Fig.1

Generating Availability and Downtime data with Charts

2. To calculate the Availability or downtime level of either RPDE or the Pools subsystem, click on either of the section tabs above. Specify the rate values in the rate section by sliding the slider widget. If the slider can't provide a desired value, input the desired value manually in text fields to the right of the sliders in the rate section.

All values in the rate section of either the RPDE or Pools tab must be specified, or else the user will be notified of a missing information error message.

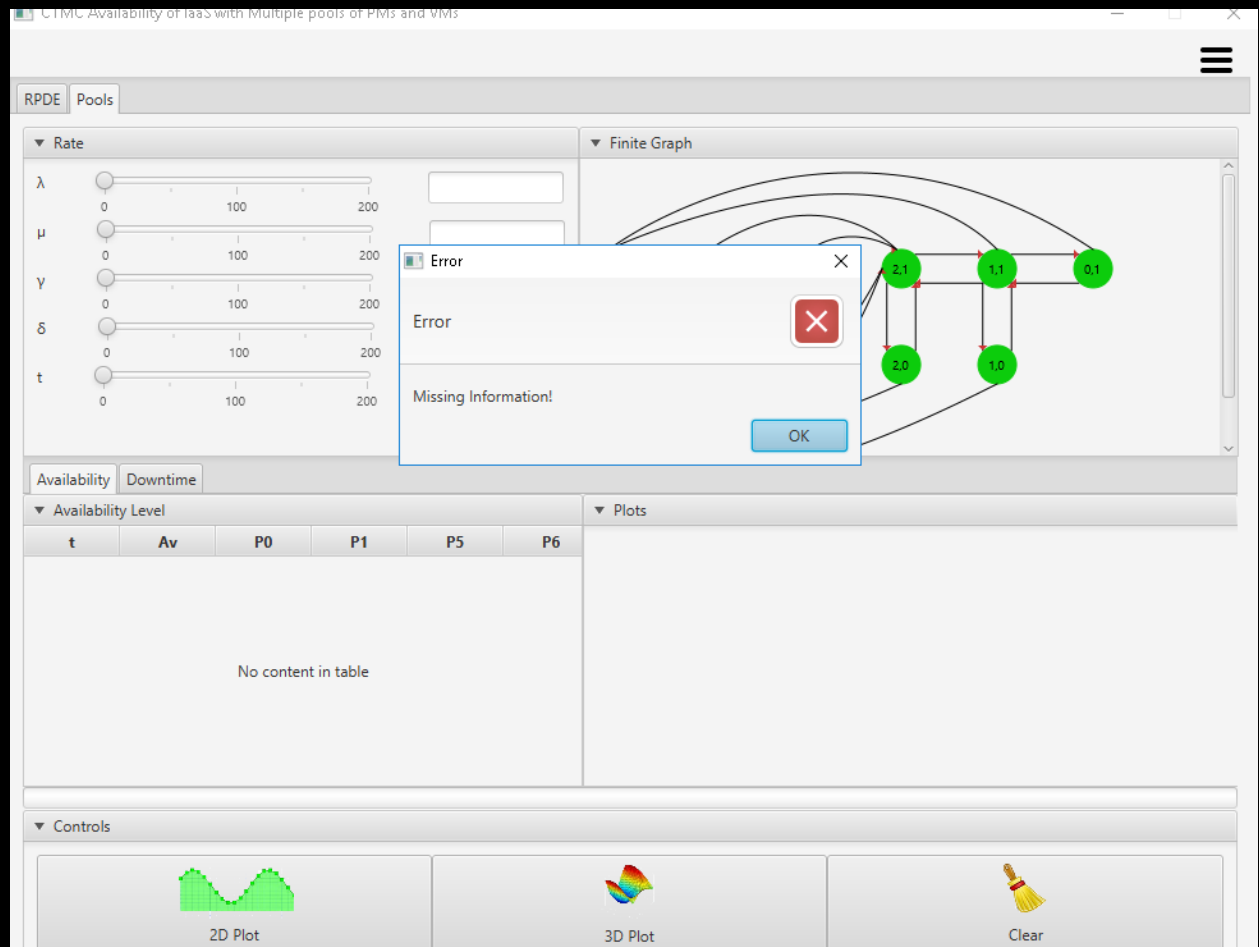


Fig.2

3. After providing the required rate values, click the 2D plot button at the bottom left corner to generate a 2D chart and table of values in the table.

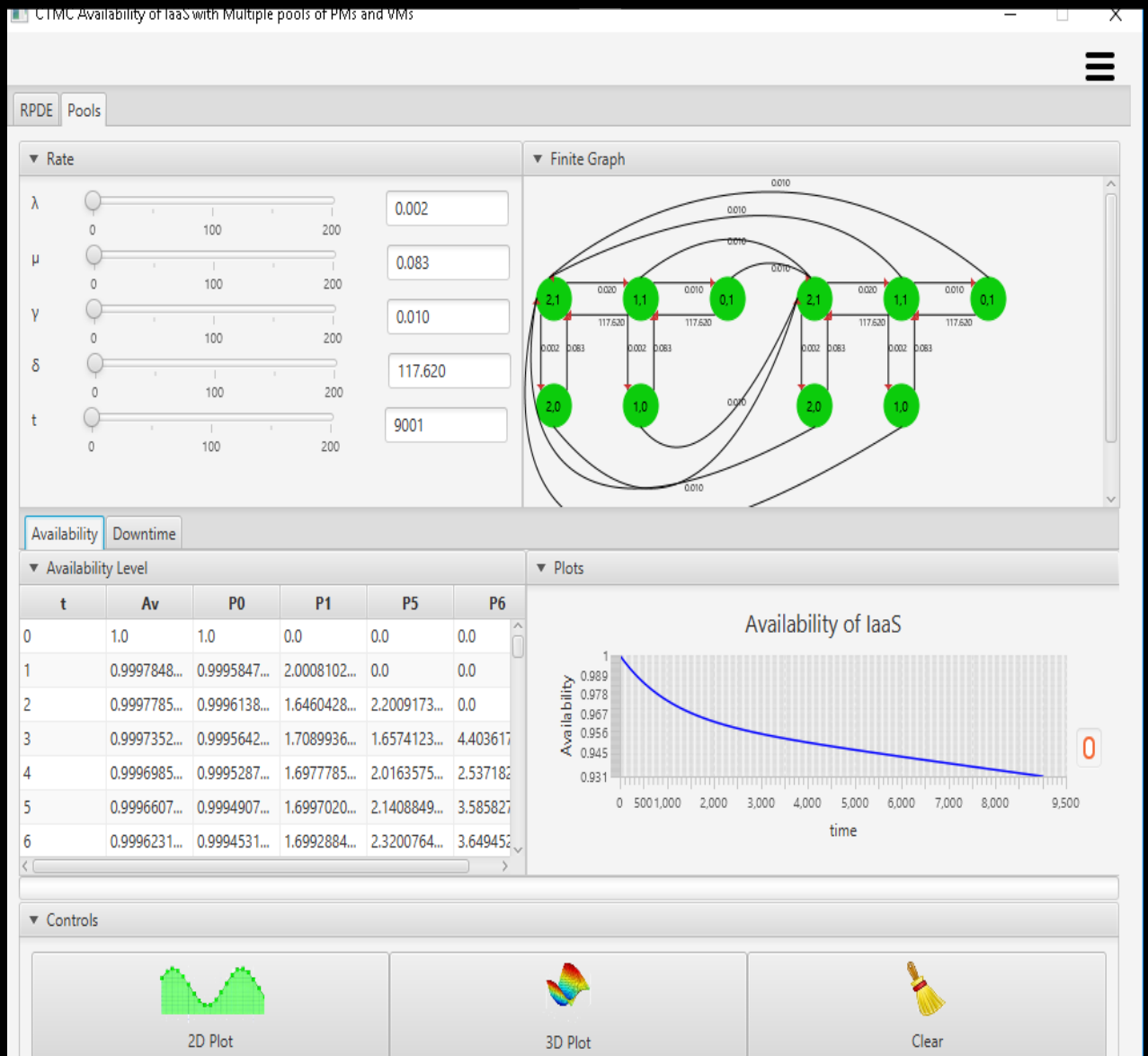


Fig.3

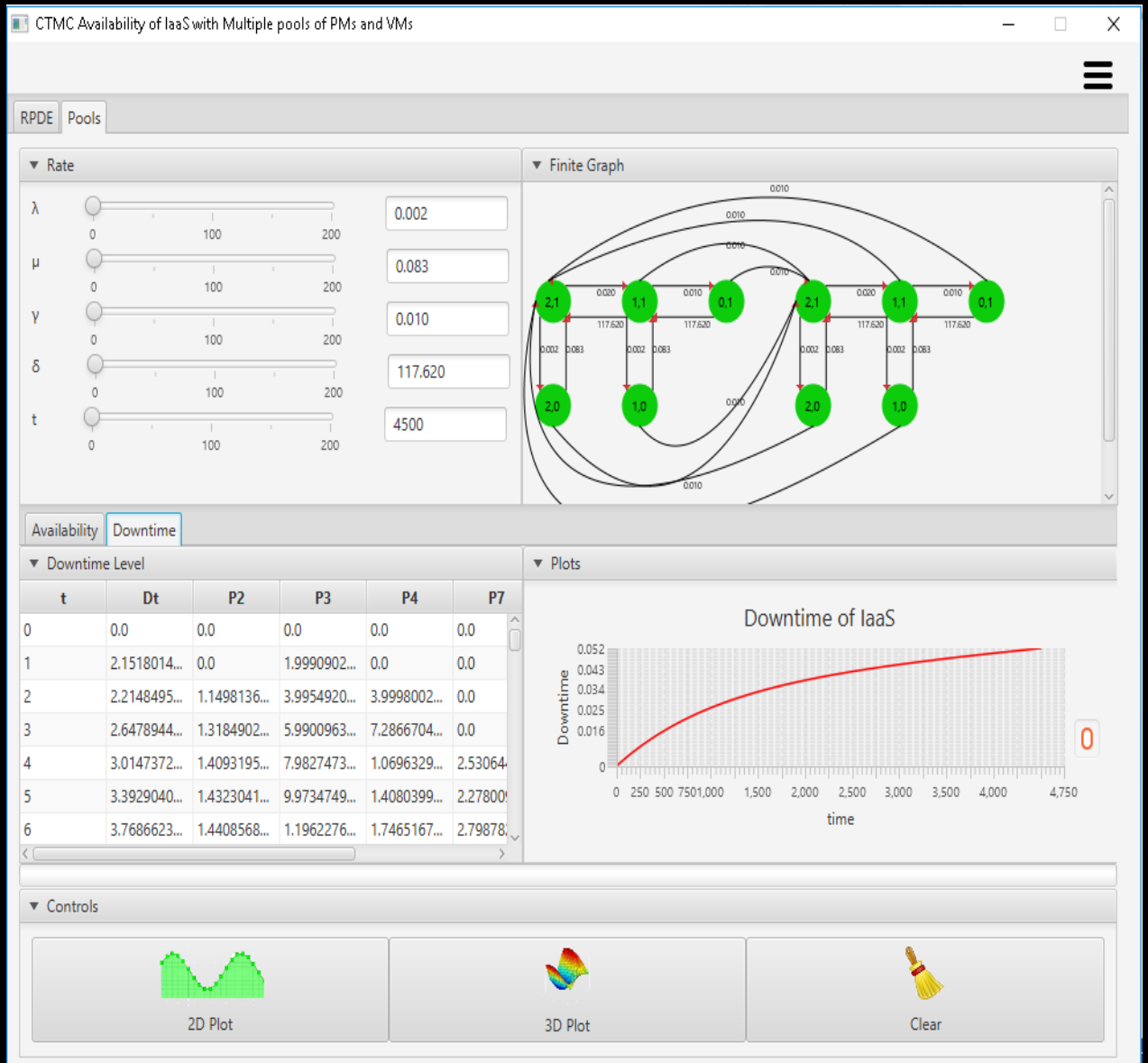


Fig.4

In order to obtain a more improved chart with better visualization capability, click the 3D plot button at the bottom center of the window and wait patiently for about 10 seconds to render the chart.

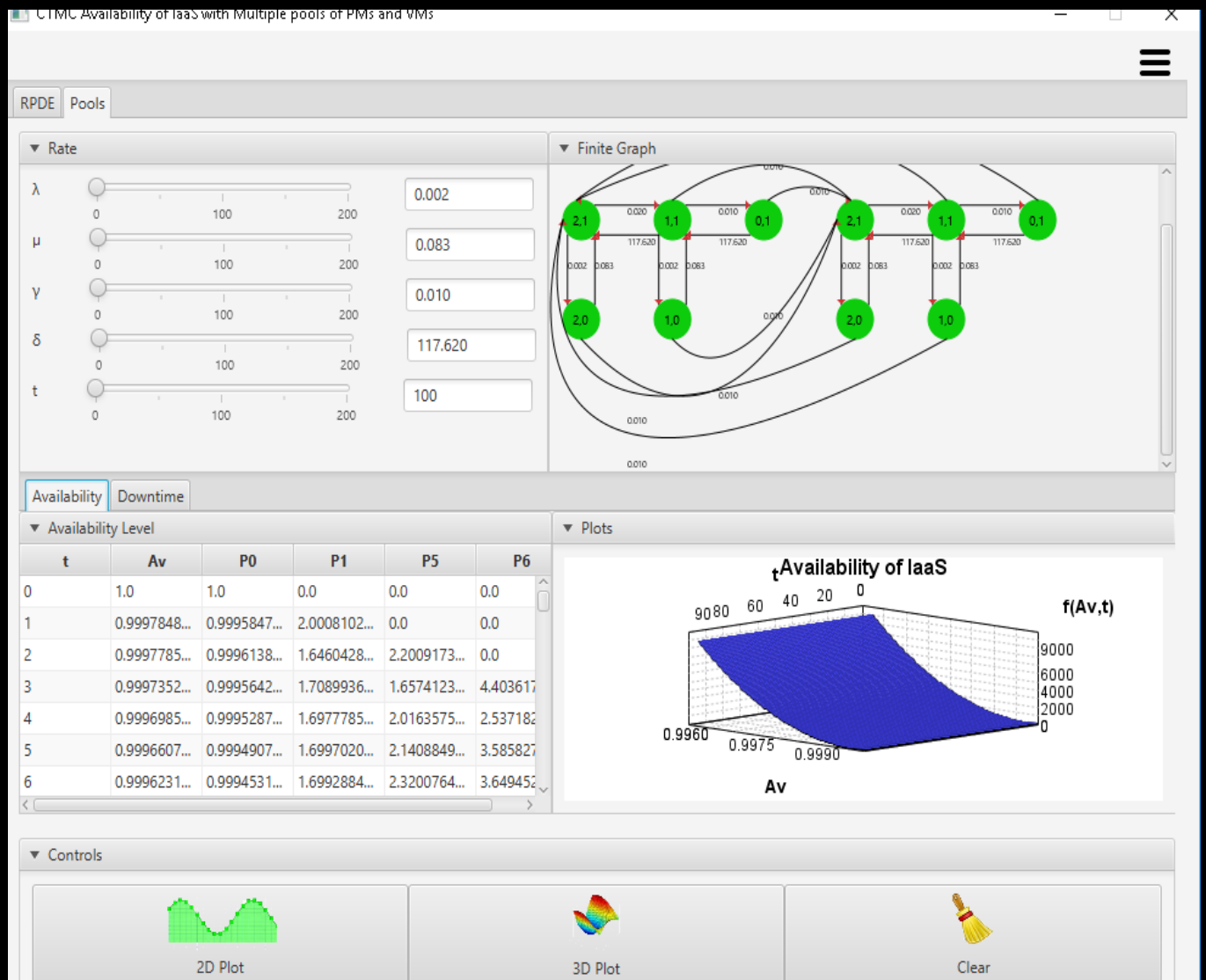


Fig.5

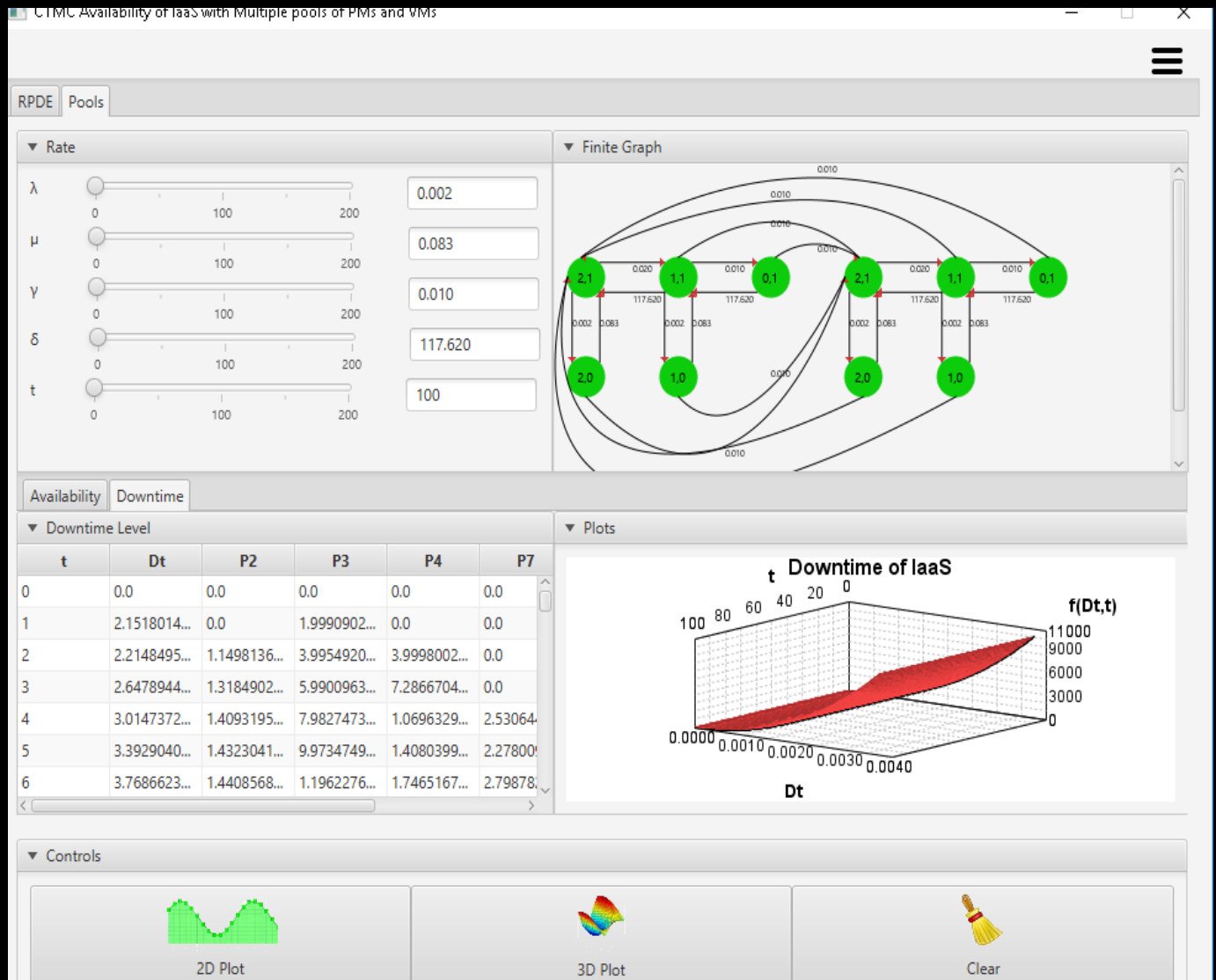


Fig.6

Note: in order to render the 3D charts in a few seconds, the “t” value at the rate section must be within the range of 1 to 100. Likewise the rendering speed of the 2D chart reduces with a corresponding reduction in the magnitude of the “t” value.

4. Toggle between the either the availability or downtime tabs to view data corresponding to either of these tabs. Scroll through the tables by dragging the horizontal scrollbar at the bottom to either the left or the right direction or by dragging the vertical scrollbar at the right of the table either upward or downwards. Hold the left mouse button and rotate the generated 3D chart in either upwards, downwards, clockwise or anticlockwise direction to get a better view of the plot in the cube.

Saving and Loading Availability and Downtime data

5. In order to save the availability or downtime data or load these data from excel, click the hamburger widget of the window, and a navigation drawer will emerge from the left of the window. Click on the save item and the file explorer will be opened. Double click the desired directory, then specify the file name (no extension is required), and click the save button. The data will be saved automatically as an excel file, and a confirmation dialog will be displayed. Click the ok button in the dialog to dismiss the message.

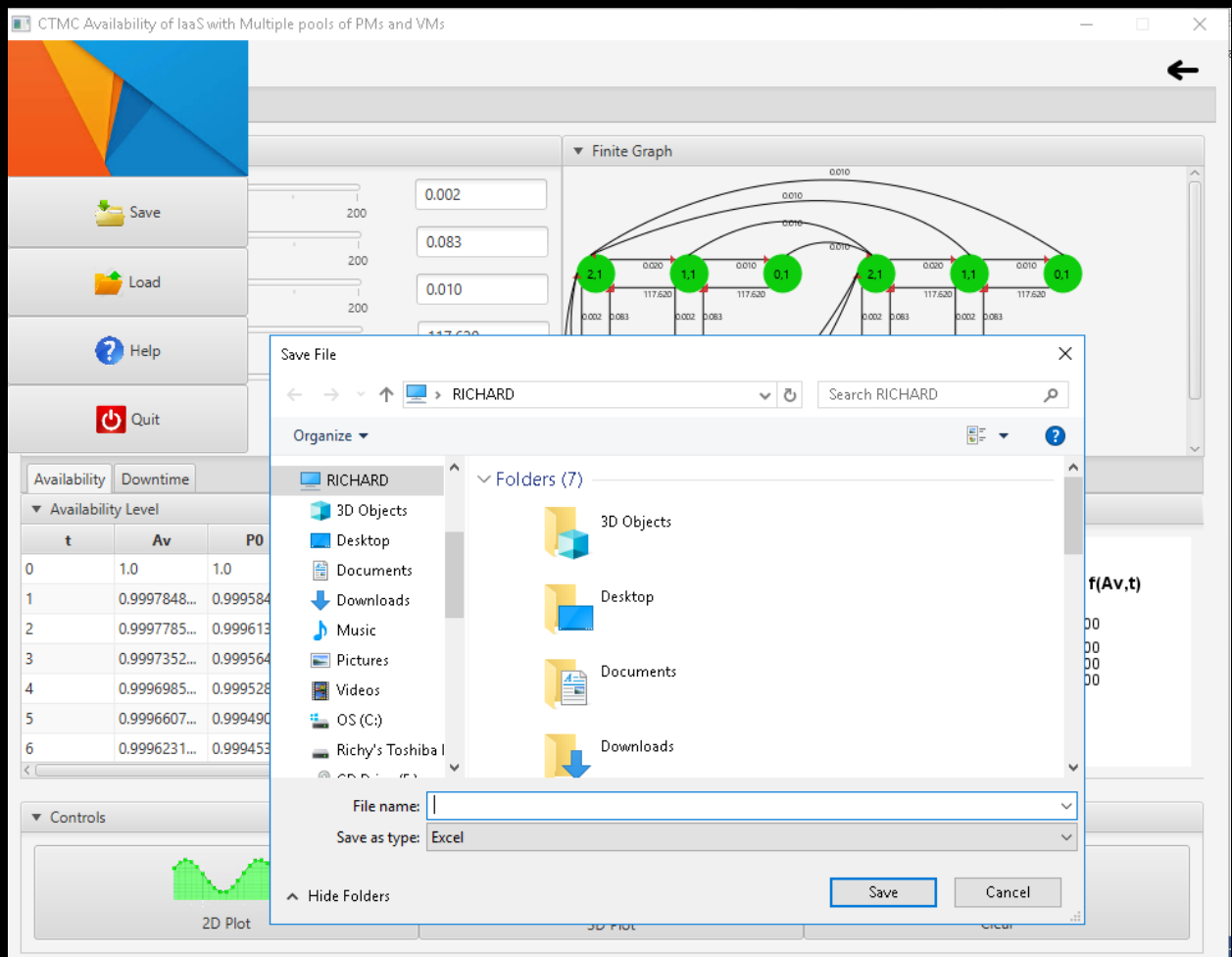


Fig.7

Likewise, to load an Availability or downtime file, click on the hamburger widget, then click on the load section of the navigation drawer. The file explorer will open, navigate to the desired directory and click on the desired file, then click the open button and the file will be loaded to the table provided it is the right file.

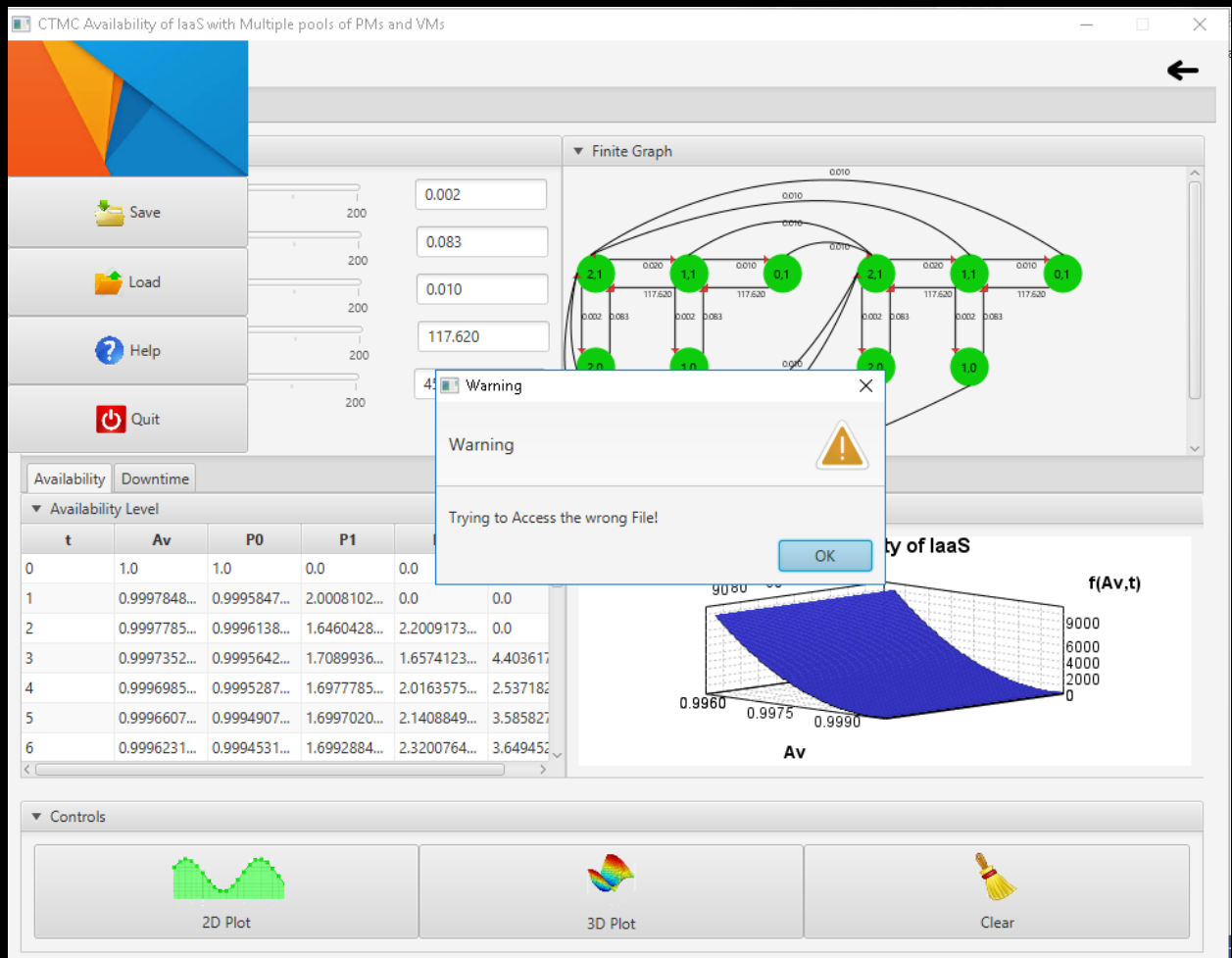


Fig.9

Getting Help and terminating the program

6. To get help instructions click help in the navigation drawer.
7. Click quit to close the program.