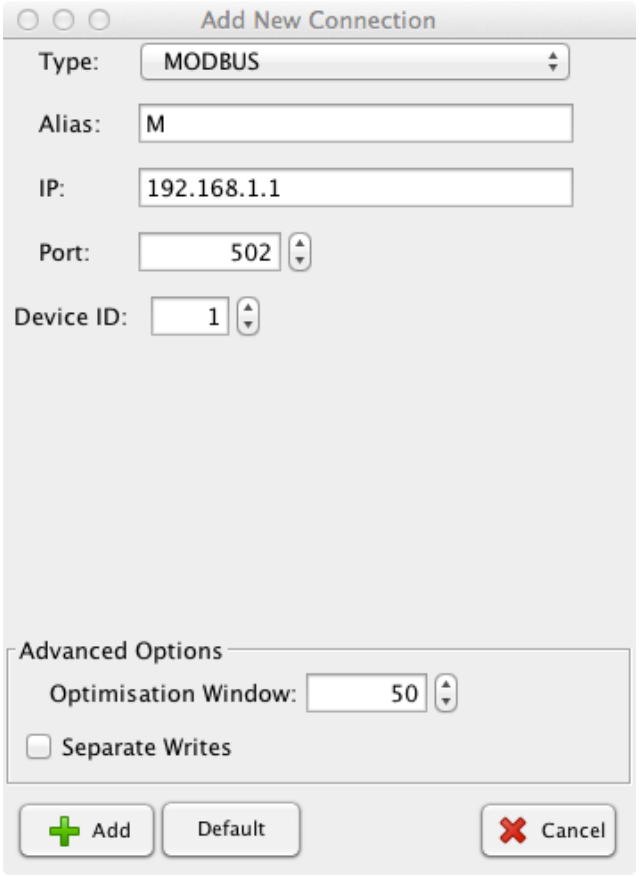
Title: **Time Sequence Tutorial**
Audience: **Beginner/Intermediate**
PLC/SPS Specific: **All**

Learn how to create advanced time animations in mySCADA.

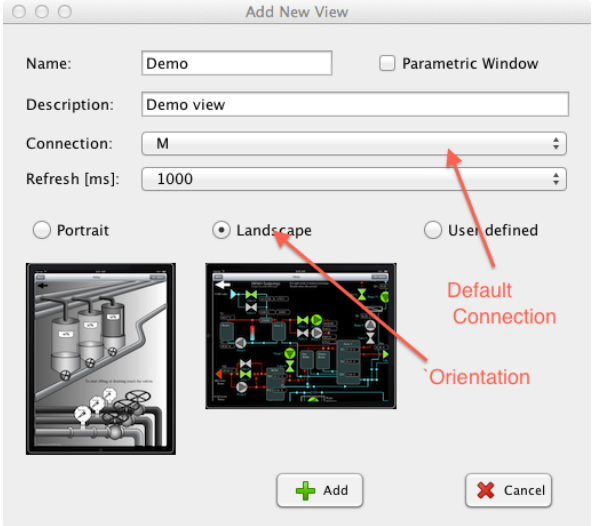
Time Sequence is a simple to use, yet extremely powerful functionality to add time based animations to your views. Time Sequence editor is implemented directly in GUI designer. It lets you graphically change properties of your drawn objects in specified time intervals. The mySCADA system automatically computes transitions among defined time intervals.

1. Open myPROJECT Designer and create a new empty project.

2. Now create connection with your PLC. Expand your project and click on communications. Click on new. Select a PLC type and fill in its *IP address*. Fill in *Alias* to be able to reference this PLC in your project.

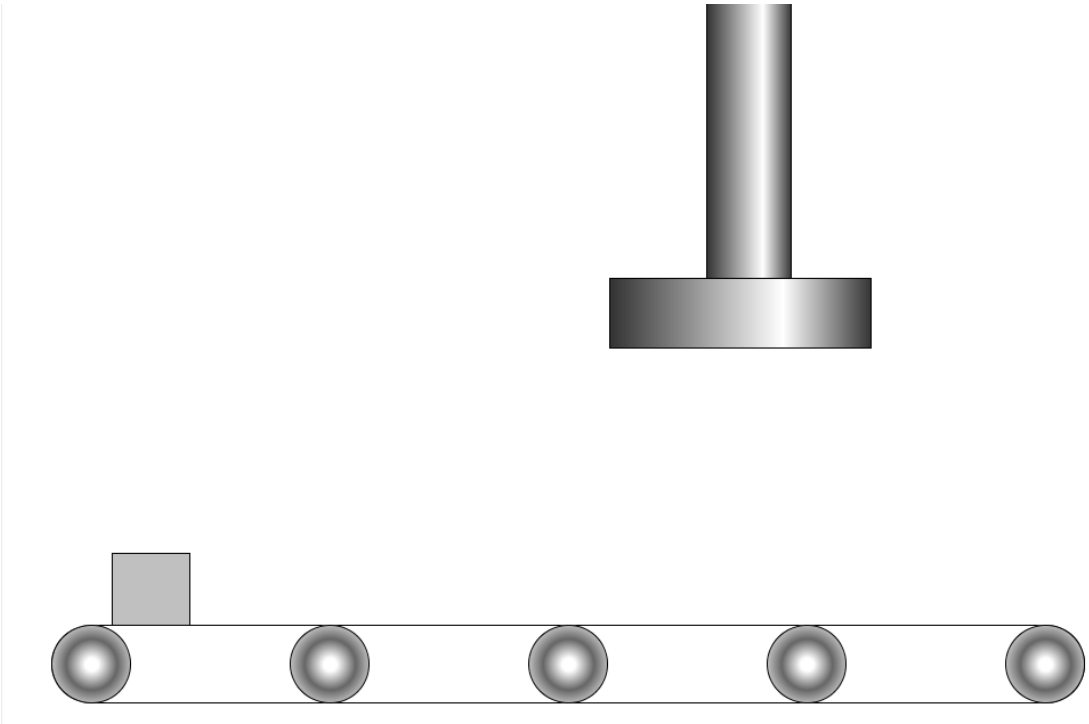


3. Now select Views in a project tree. Click on a *New View* icon located in the main toolbar. You are presented with a dialog. Here fill in a view name and select orientation of your view.

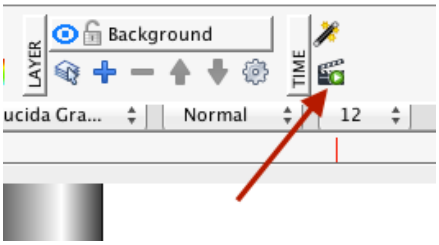


Confirm by pressing Add button.

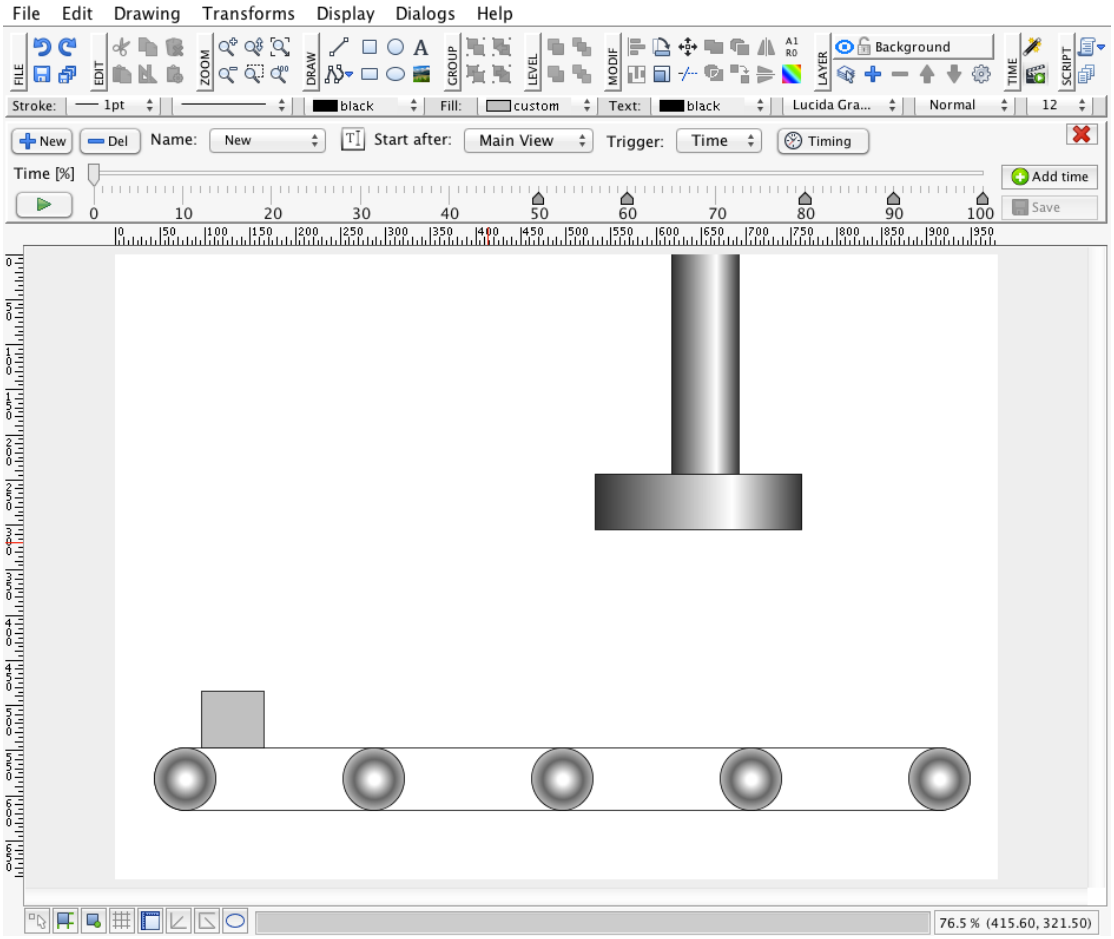
4. Now you are in a GUI designer. Create scene like this to continue:



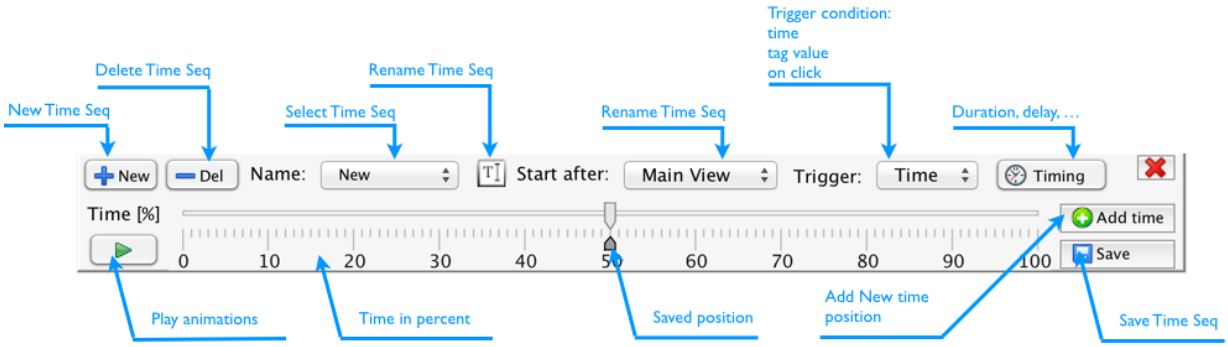
5. Now its time to give our scene some action. Open the Time Sequence Editor by clicking on Time Sequence Button in GUI toolbar



The Time Sequence Editor will open:

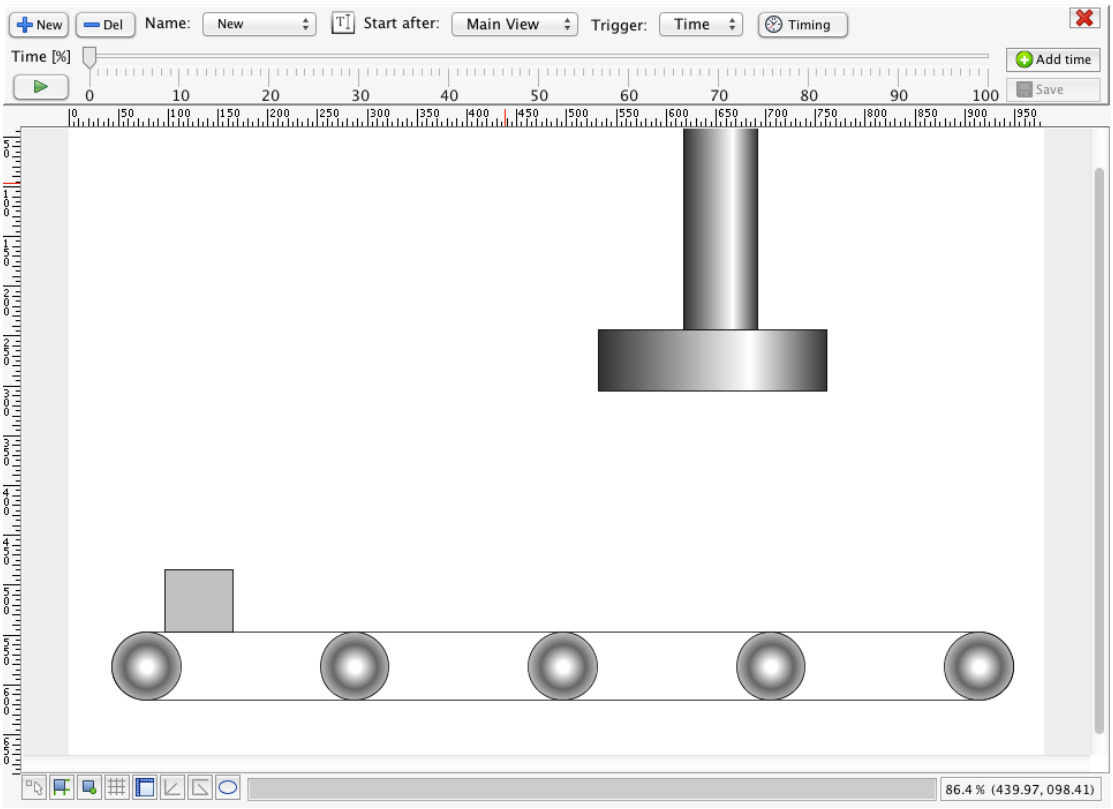


Explanation of controls:



6. Now its time to animate our scene.

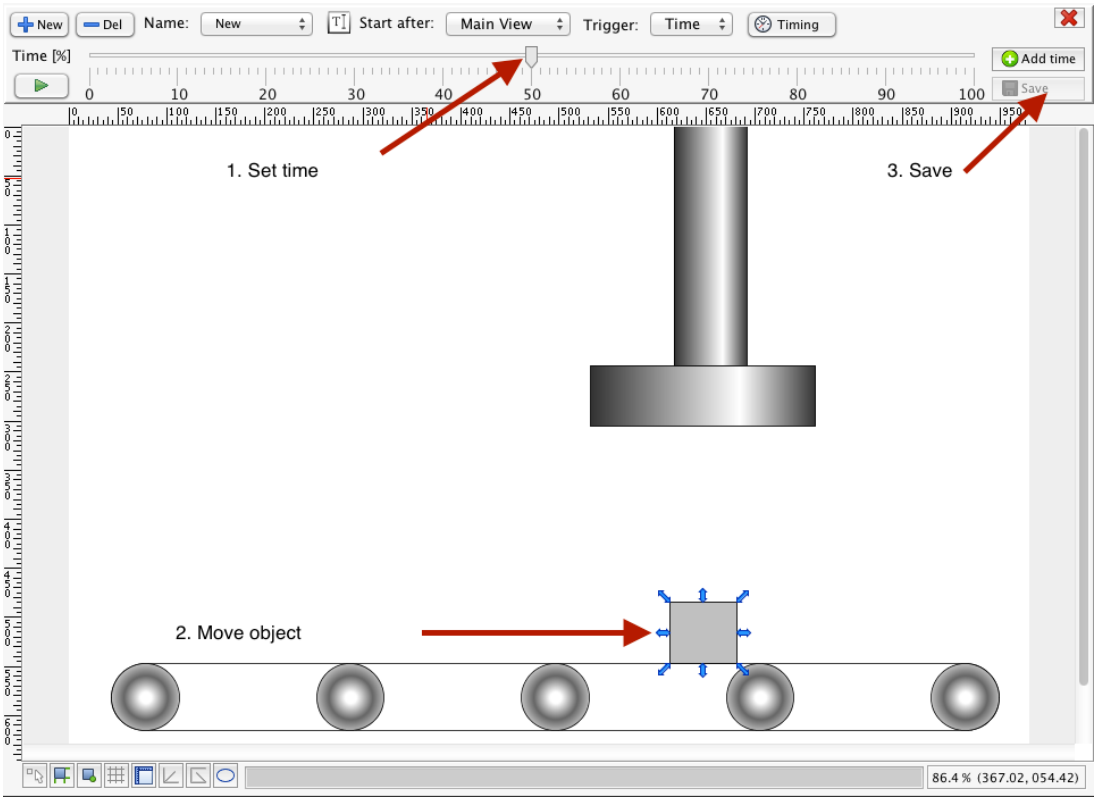
Scene at time 0:



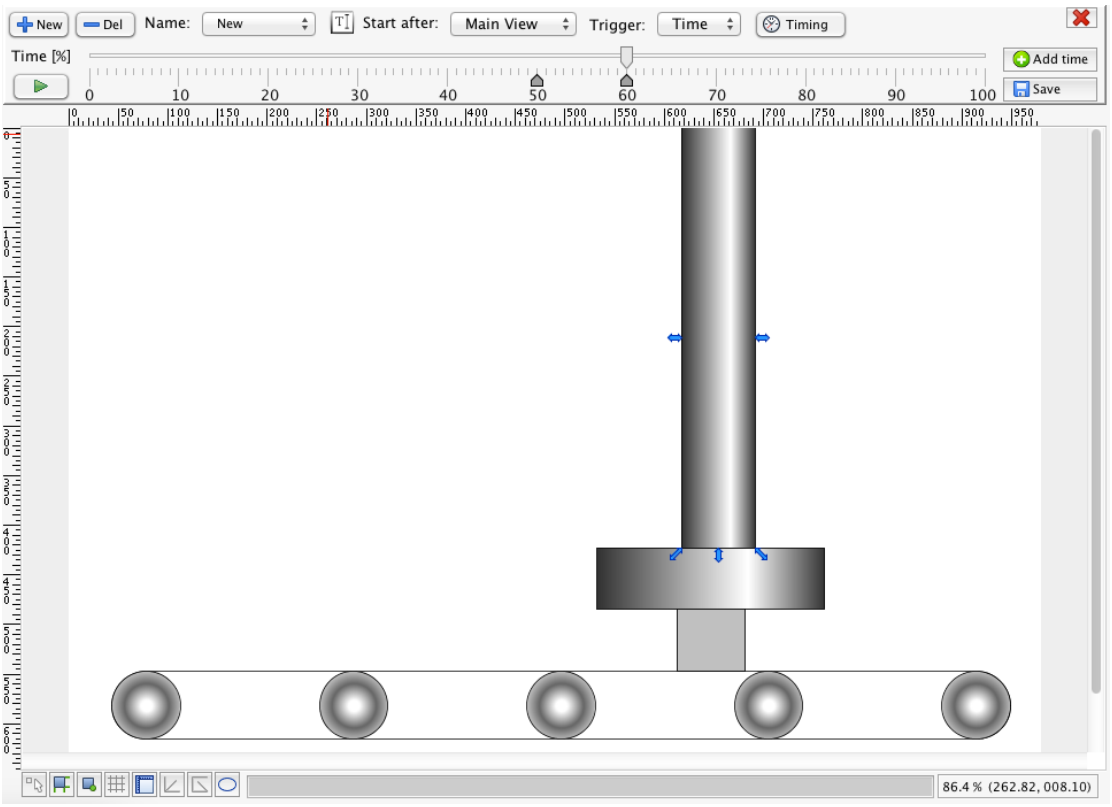
First step is to move the time to new position, than you modify your objects how they would be positioned and look at that time position.

Scene at time 50 percent

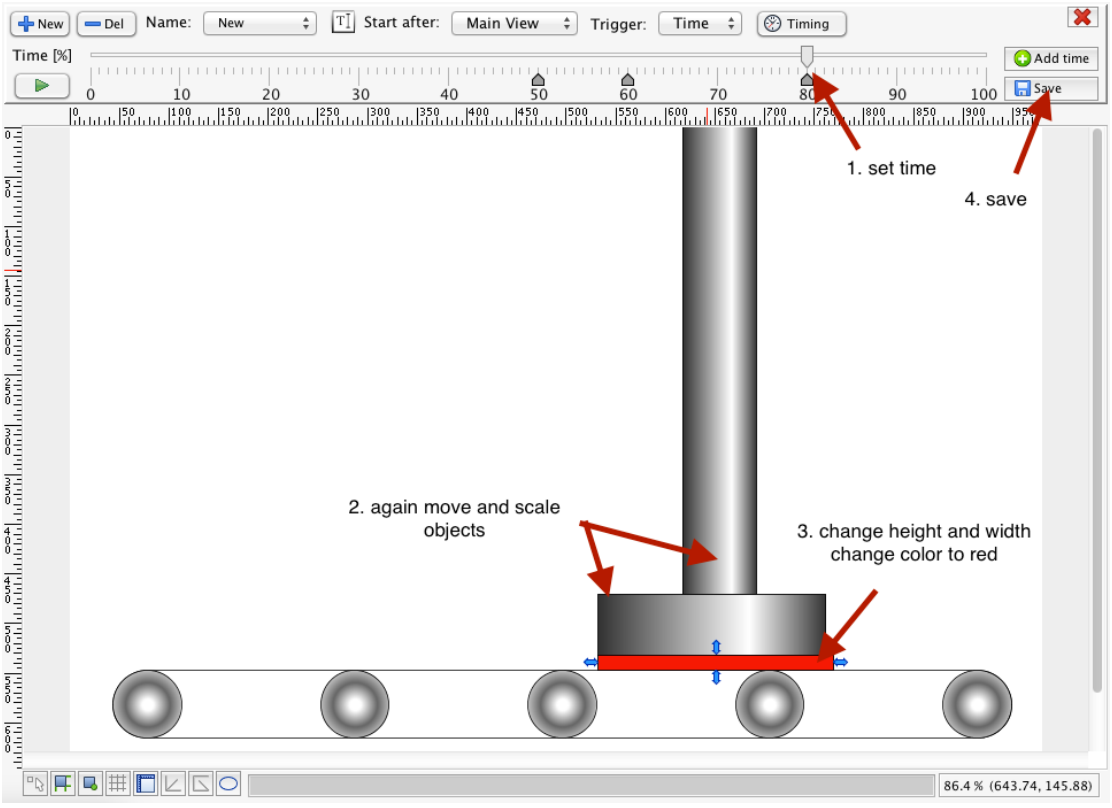
(Time can be set in Timing button, default is 10 seconds, so 50 percent will be 5 seconds)



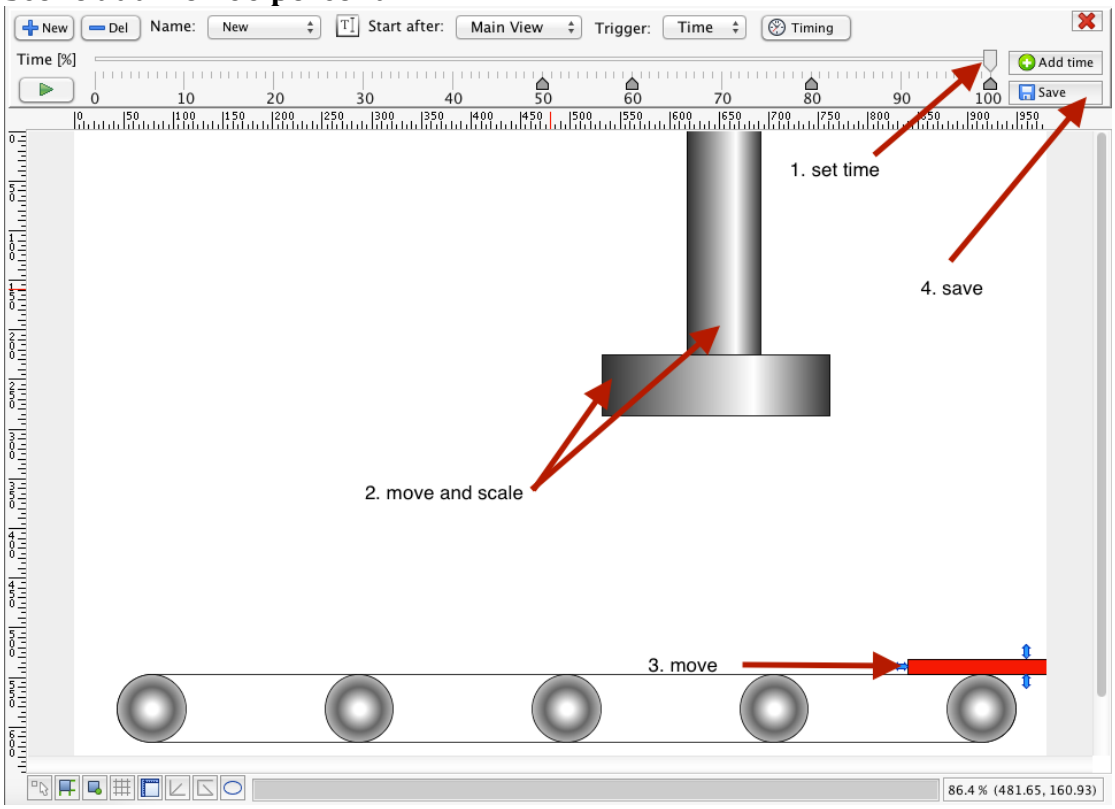
Scene at time 60 percent



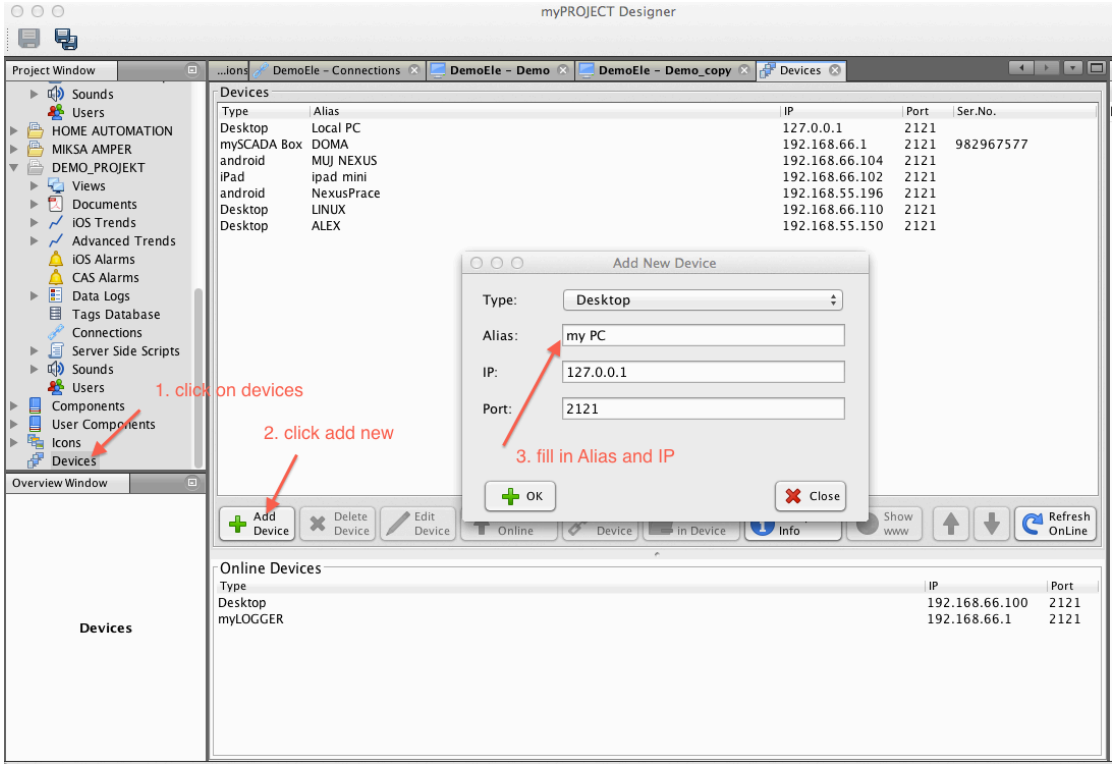
Scene at time 80 percent



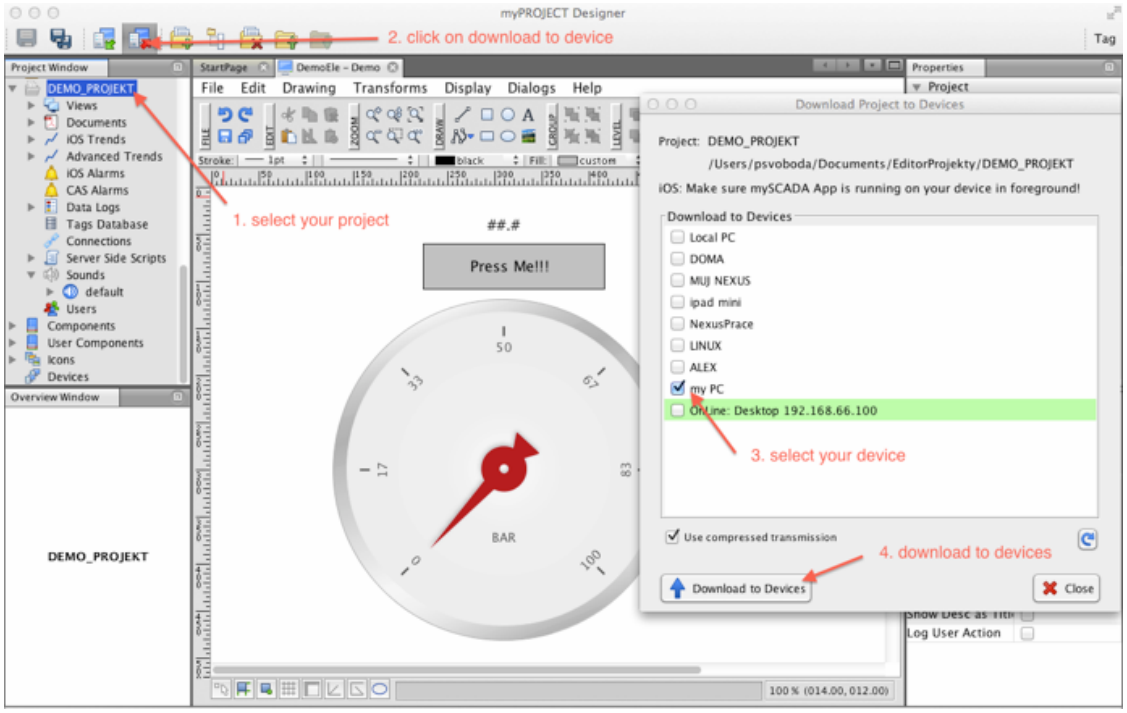
Scene at time 100 percent



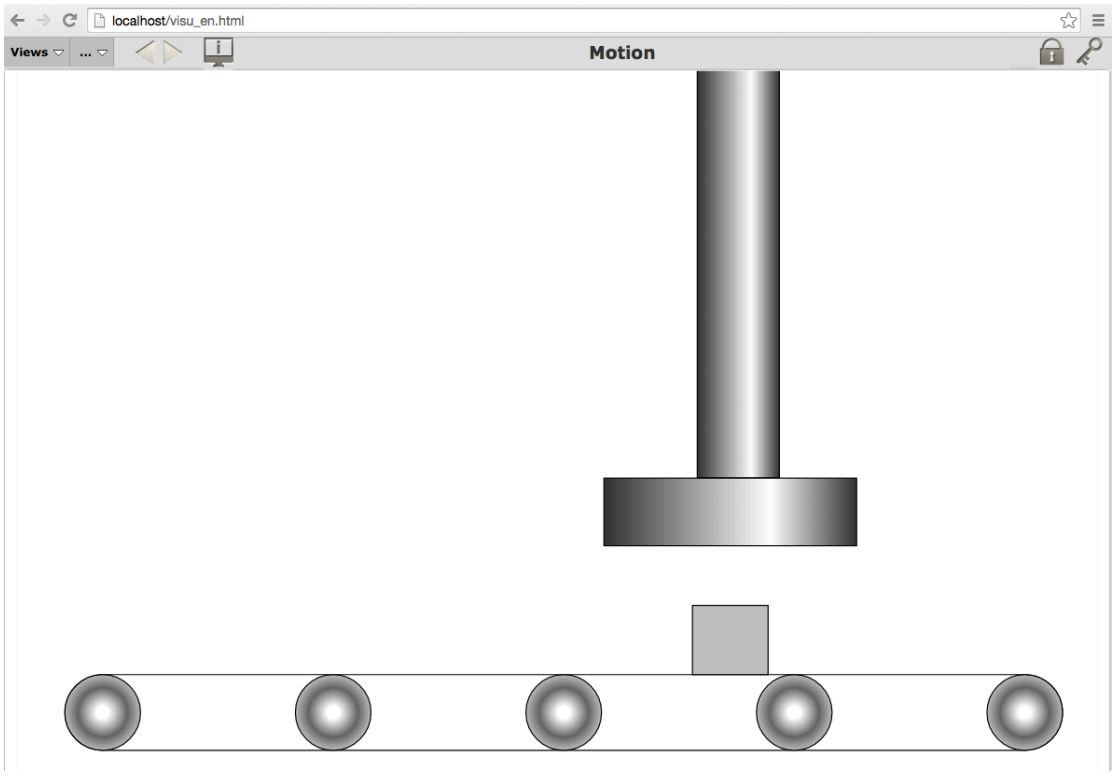
7. In last step download project to your device. In a project tree select devices and click add new. Select device type and fill in alias (any name will do) and IP address.



Now click on your project in projects tree and click on download in a main toolbar. In download dialog select your device and click download.

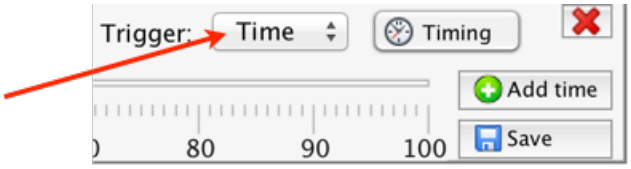


8. Test your project. Open your web browser and fill in the IP address of your device.



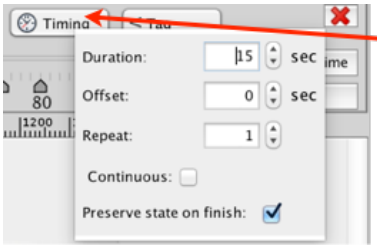
Advanced Options:

Time Sequence can be triggered by:



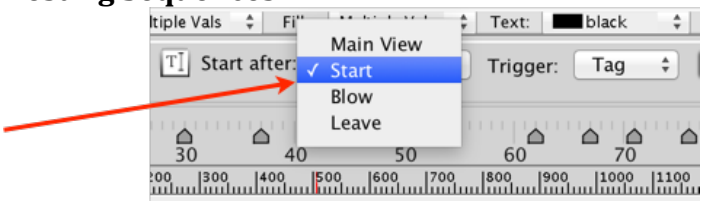
TIME: from view shown
TAG: value read from PLC or variable
CLICK: on any graphical object

Modify timing:



You can specify overall duration of sequence in seconds. Also you can specify time offset of sequence before start and number of repeats. If you need to keep your animation running while condition is true, you can choose continuous option.

Nesting Sequences:



You can create multiple time sequences. Then for any time sequence, you can specify the dependency on previous time sequence. This way you can fine control your animation process. For example, if you have 5 steps to do in your production process, you will create 5 time sequences. For second time sequence, you will set “Start after” first time sequence and so on for the rest of time sequences.

When you run first time sequence, it will finish after its duration and system will wait for trigger condition of second animation to get valid. Then second animation will start and so on.