XML Editing

Dick Bronson - RR-CirKits, Inc.

Further Clinics in this series:

- Create a Detailed CTC Machine Model with JMRI/PanelPro

  10:00 PM, Monday, July 6th

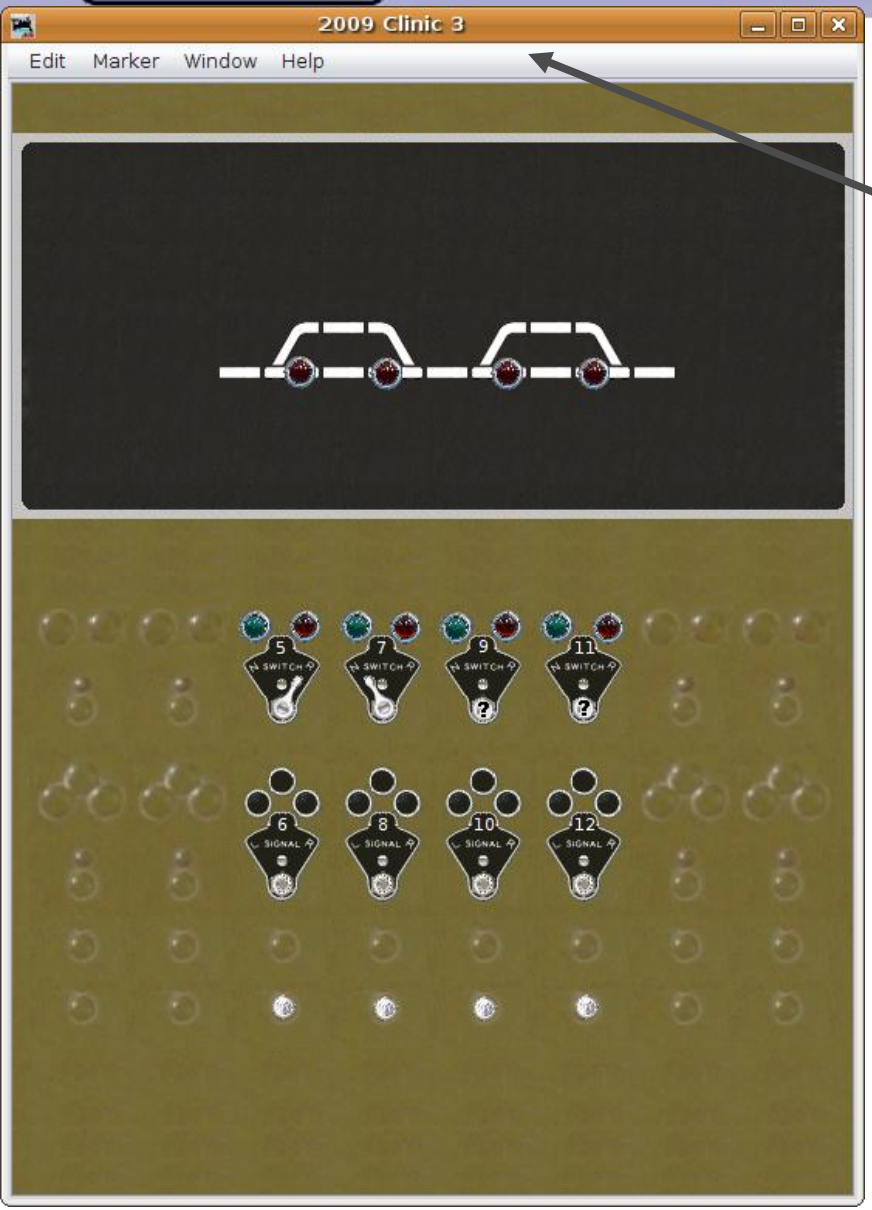
- Introduction to Layout Control with JMRI/PanelPro

  - This Clinic is a Repeat 4:00 PM, Friday, July 10th

XML Editing

Where we are going:

- New graphical editing options for Logix and Panels
- SSL – Simple Signal Logic (SSL-clinic-2)



Logix copy

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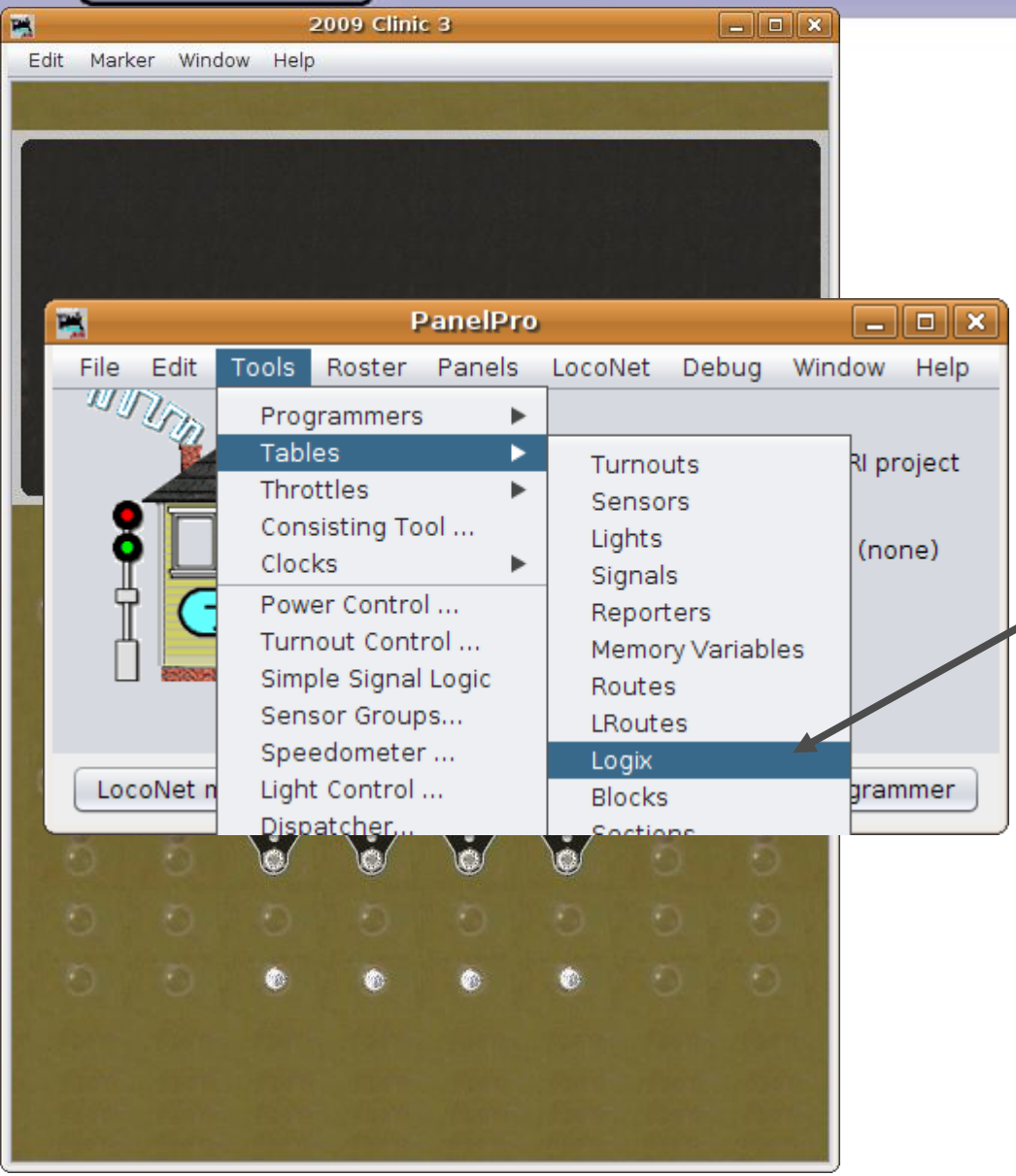

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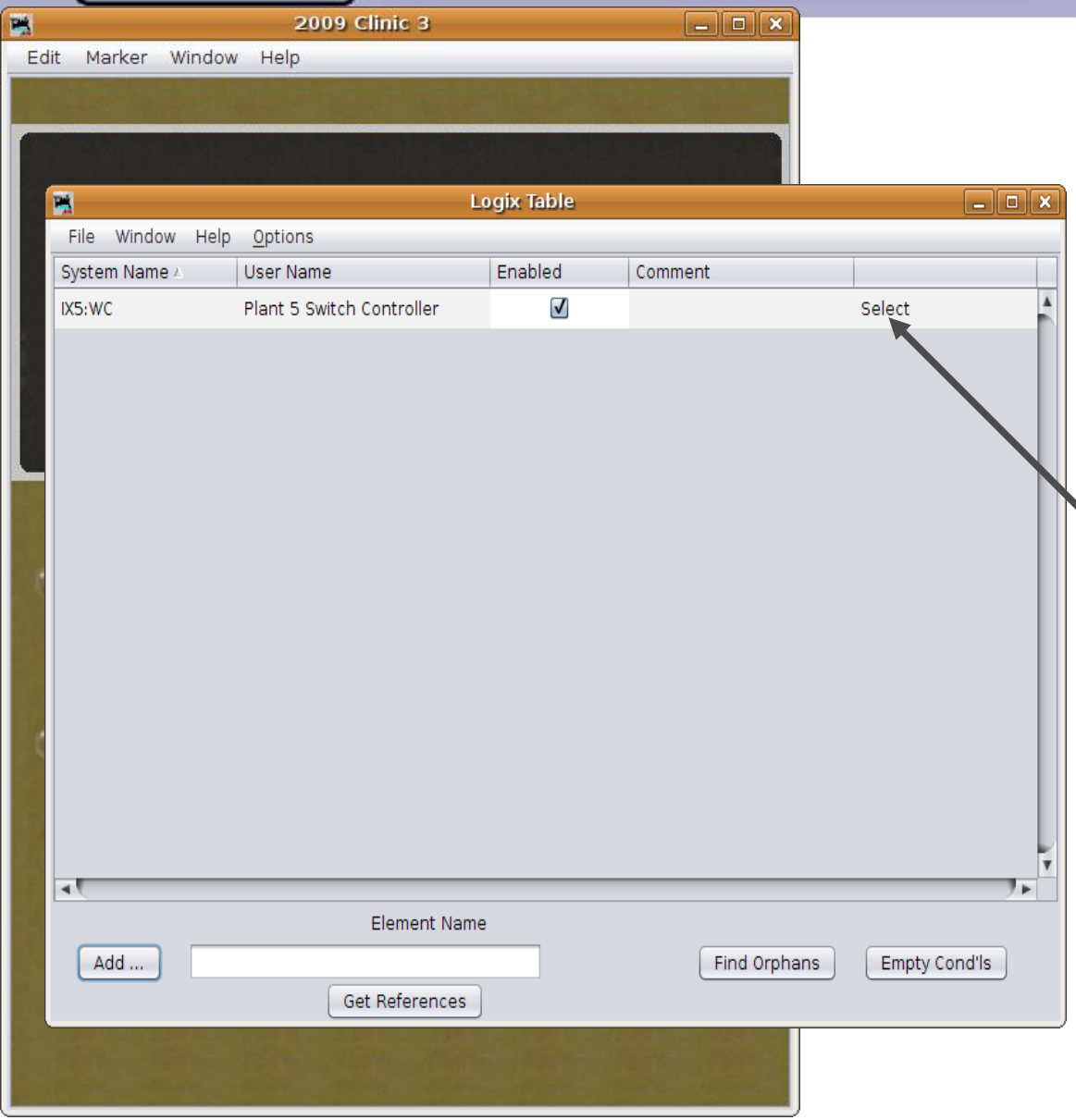

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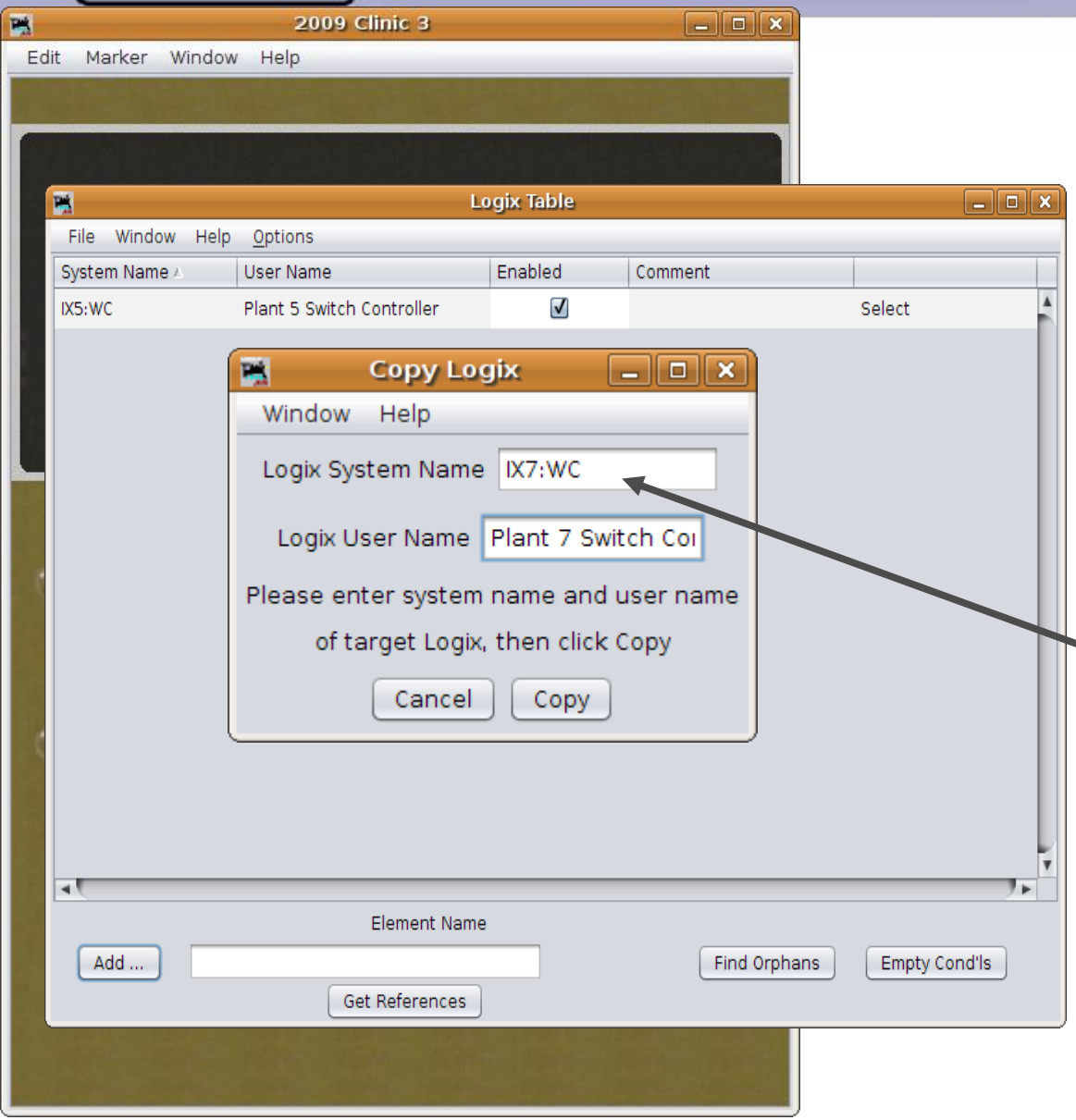
- Click 'Select' and choose 'Copy'



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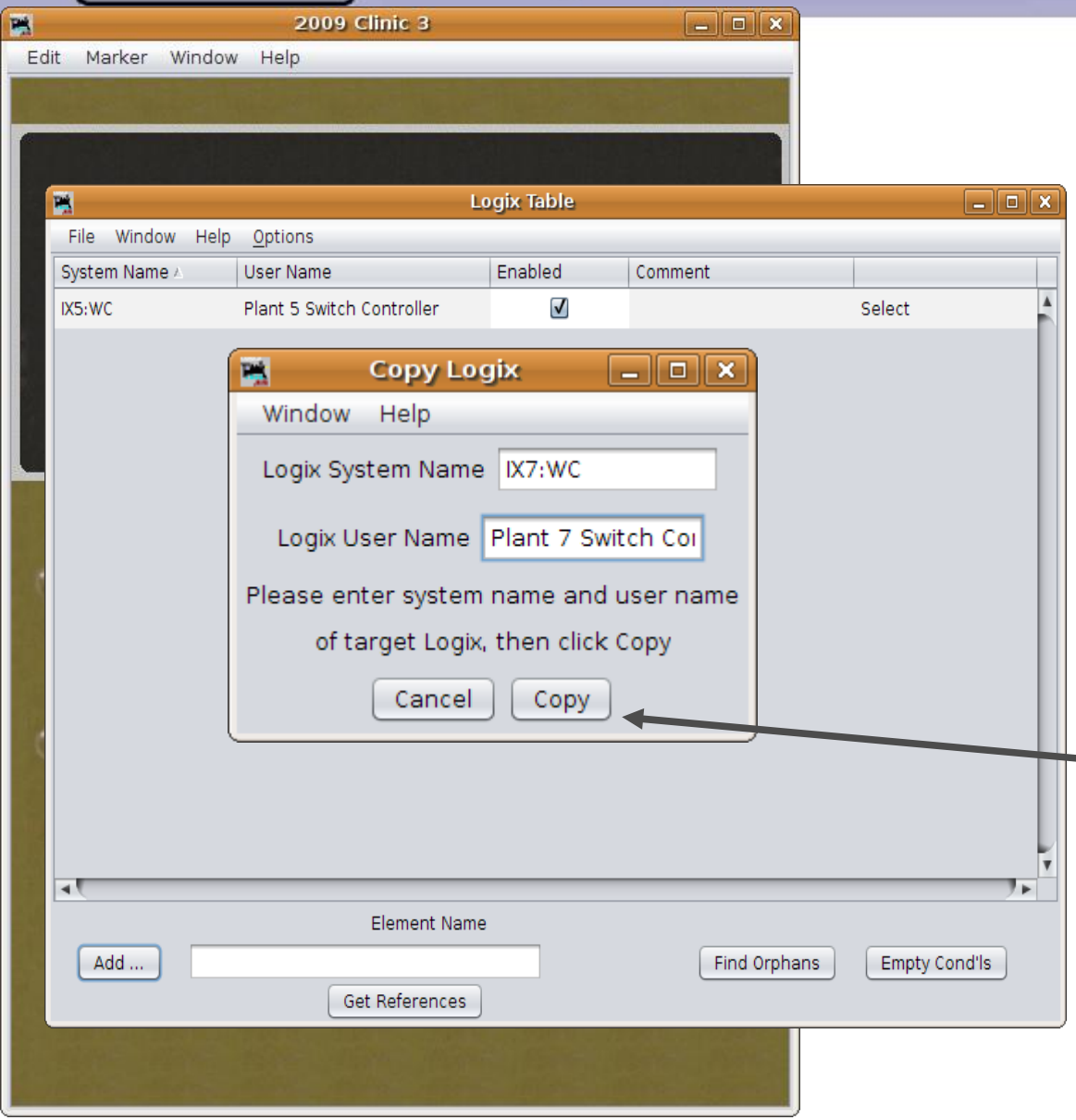

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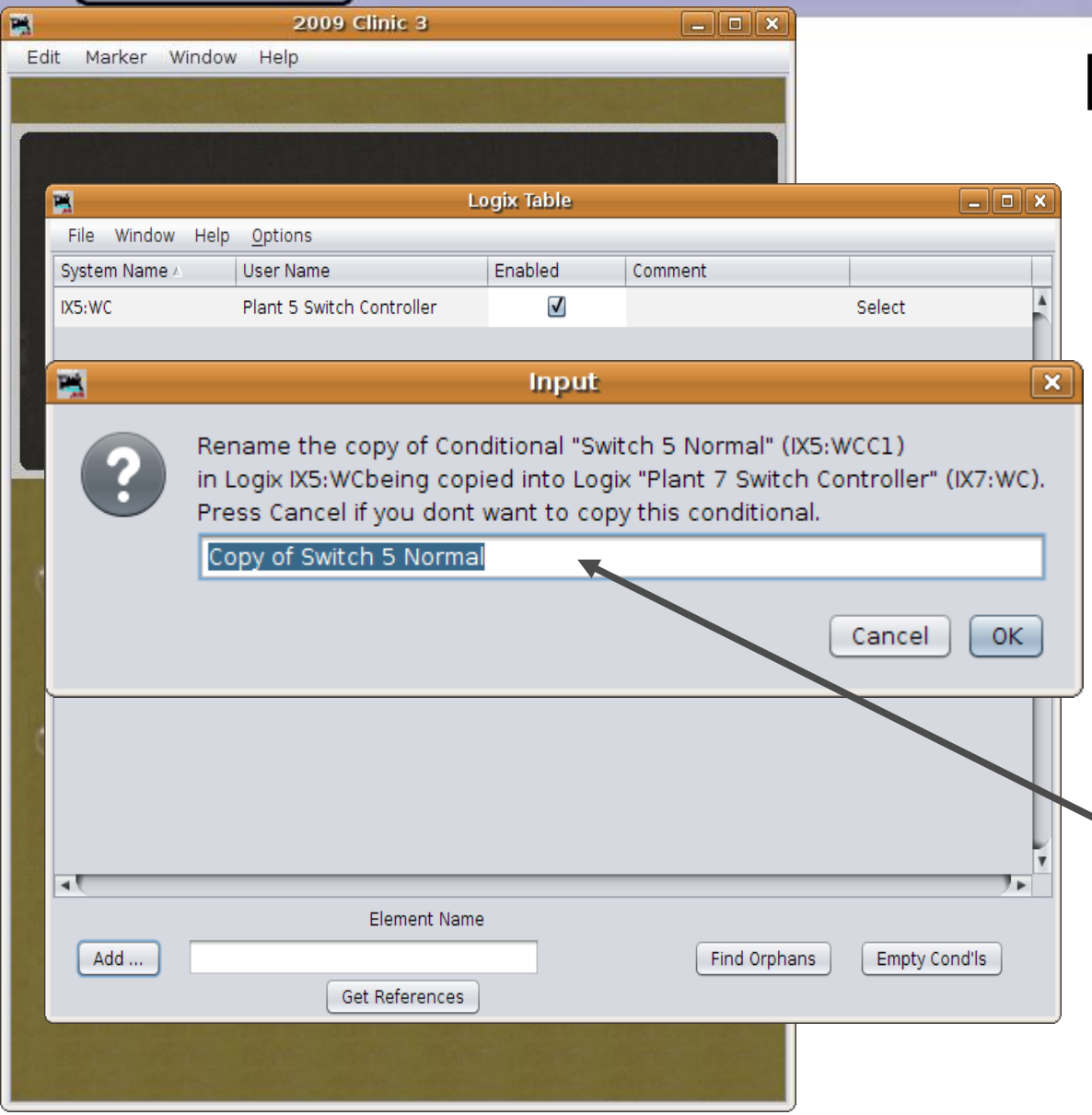

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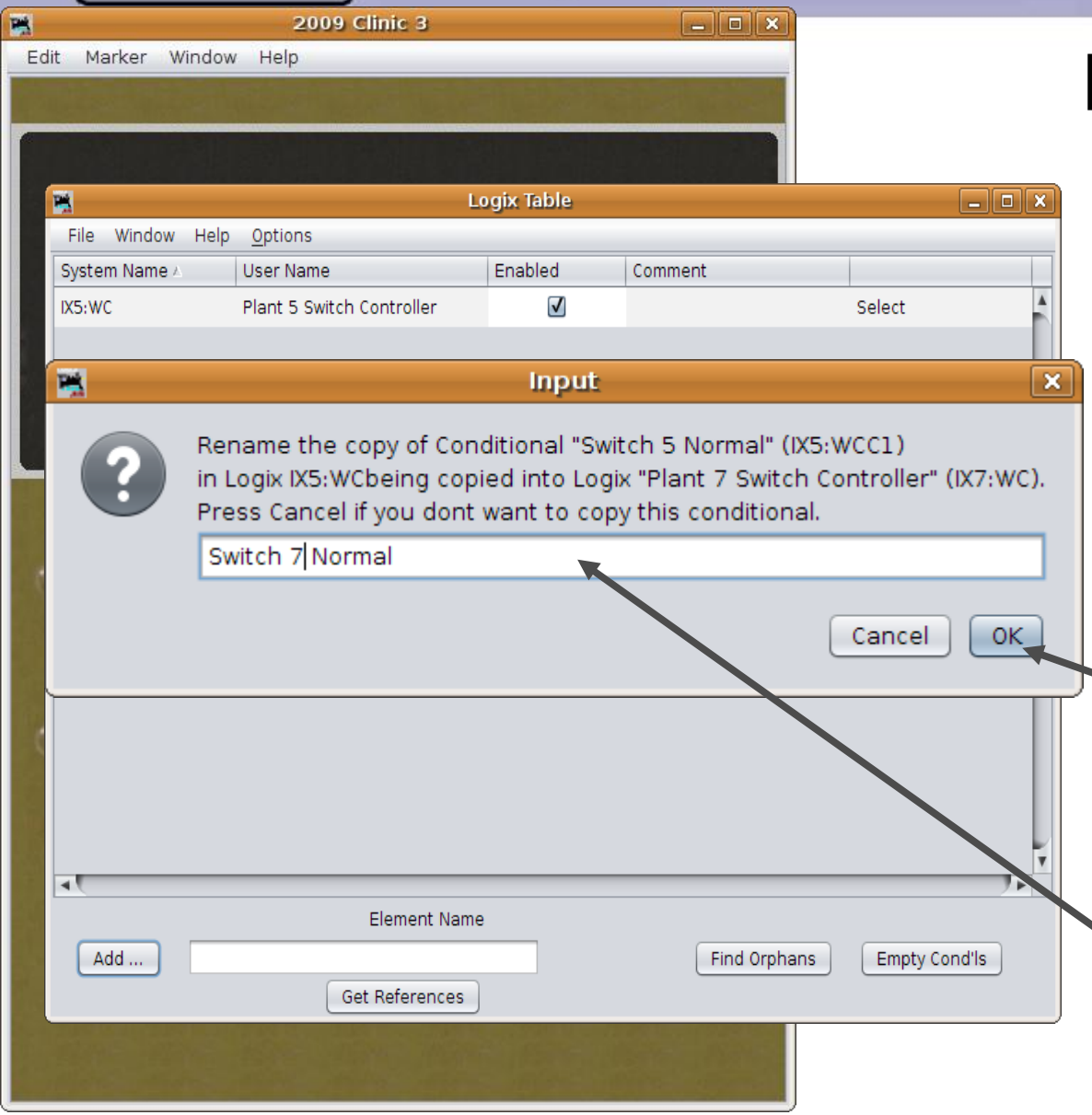
- Change the names of each conditional you want to copy.



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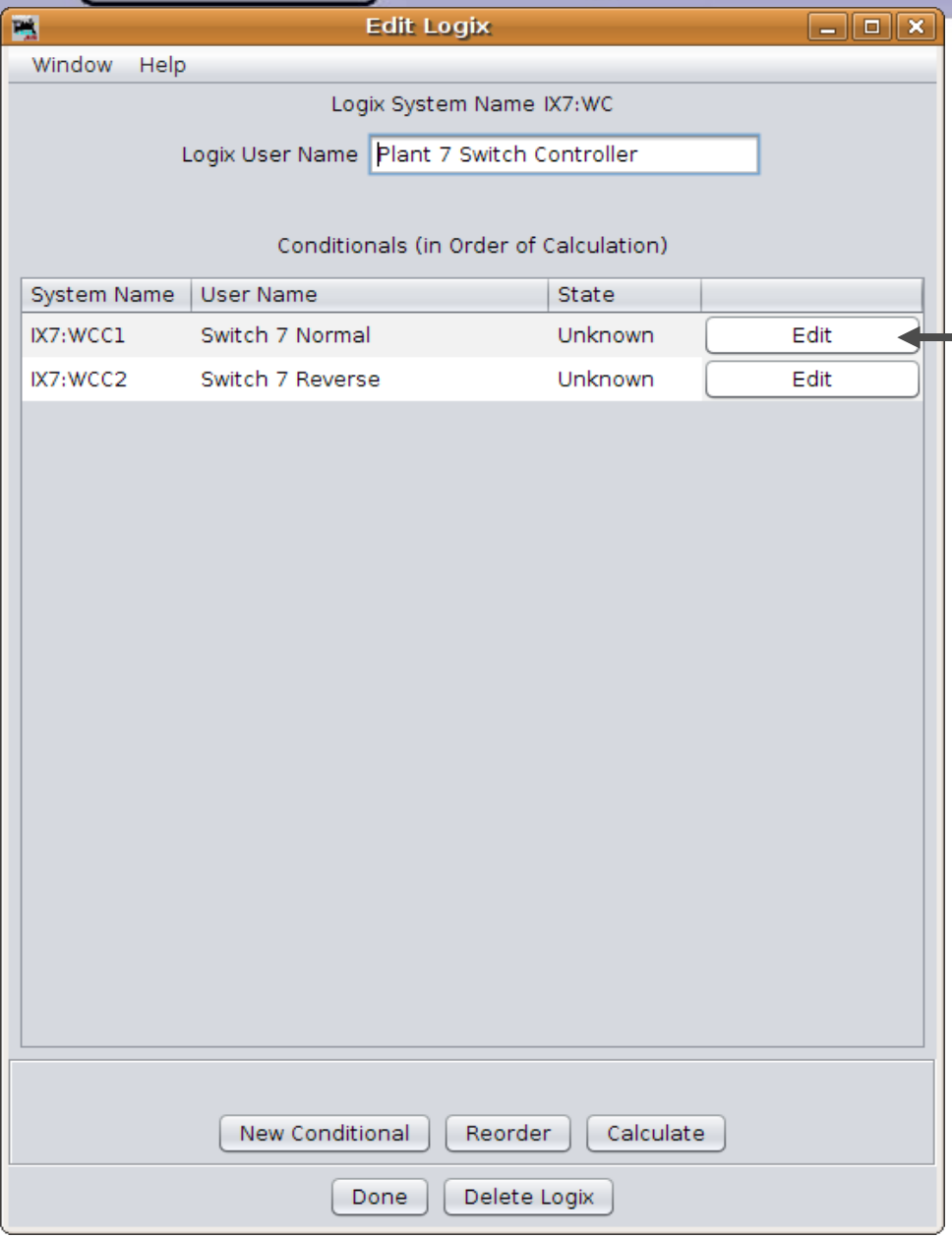
- Enter the new Logix names.
- Then 'Copy'
- Change the names of each conditional you want to copy.
- To their new values, then click 'OK'



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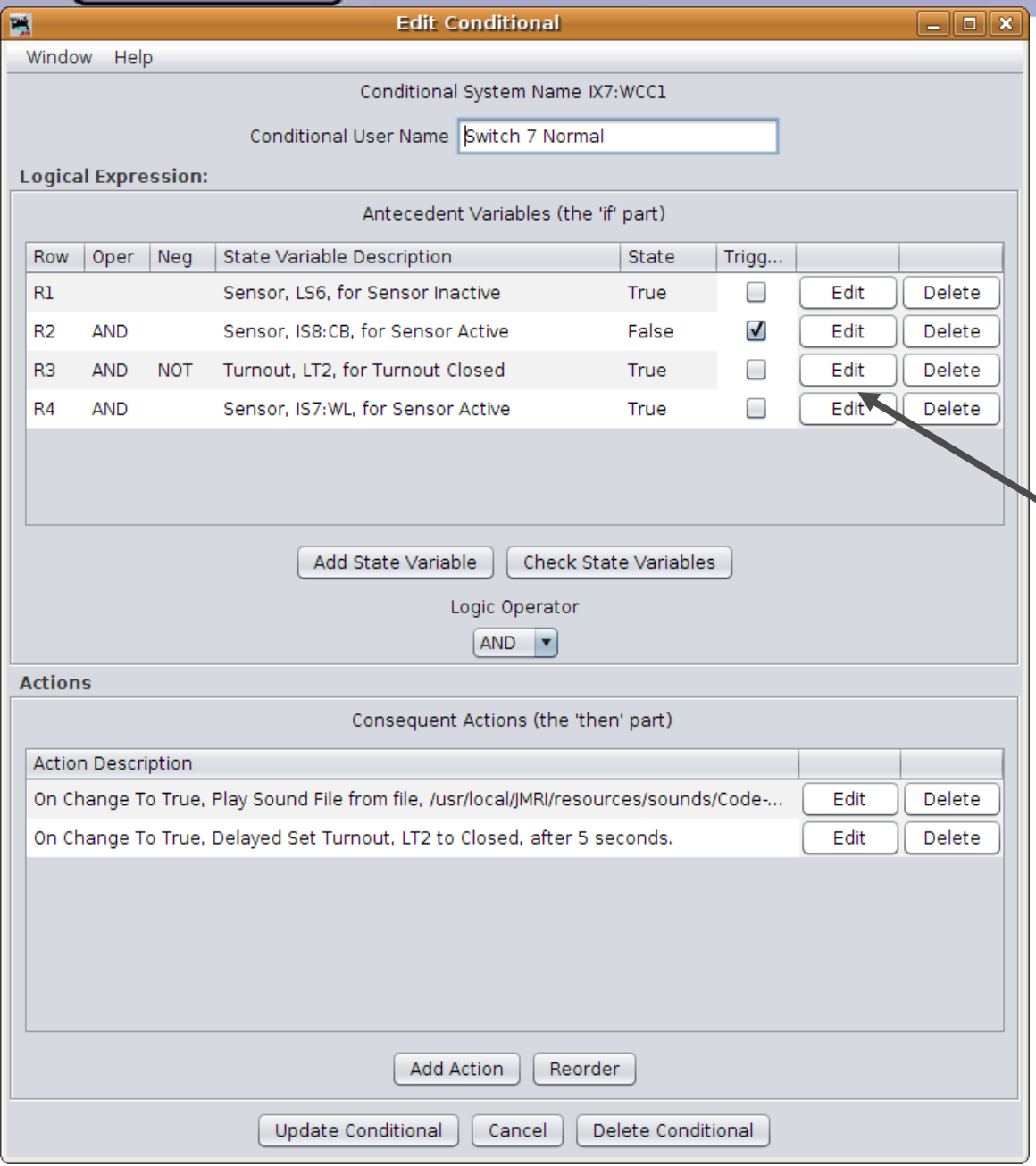
- This copied the full structure of the Logix under a new name but of course you must still edit each conditional and enter its proper new values.



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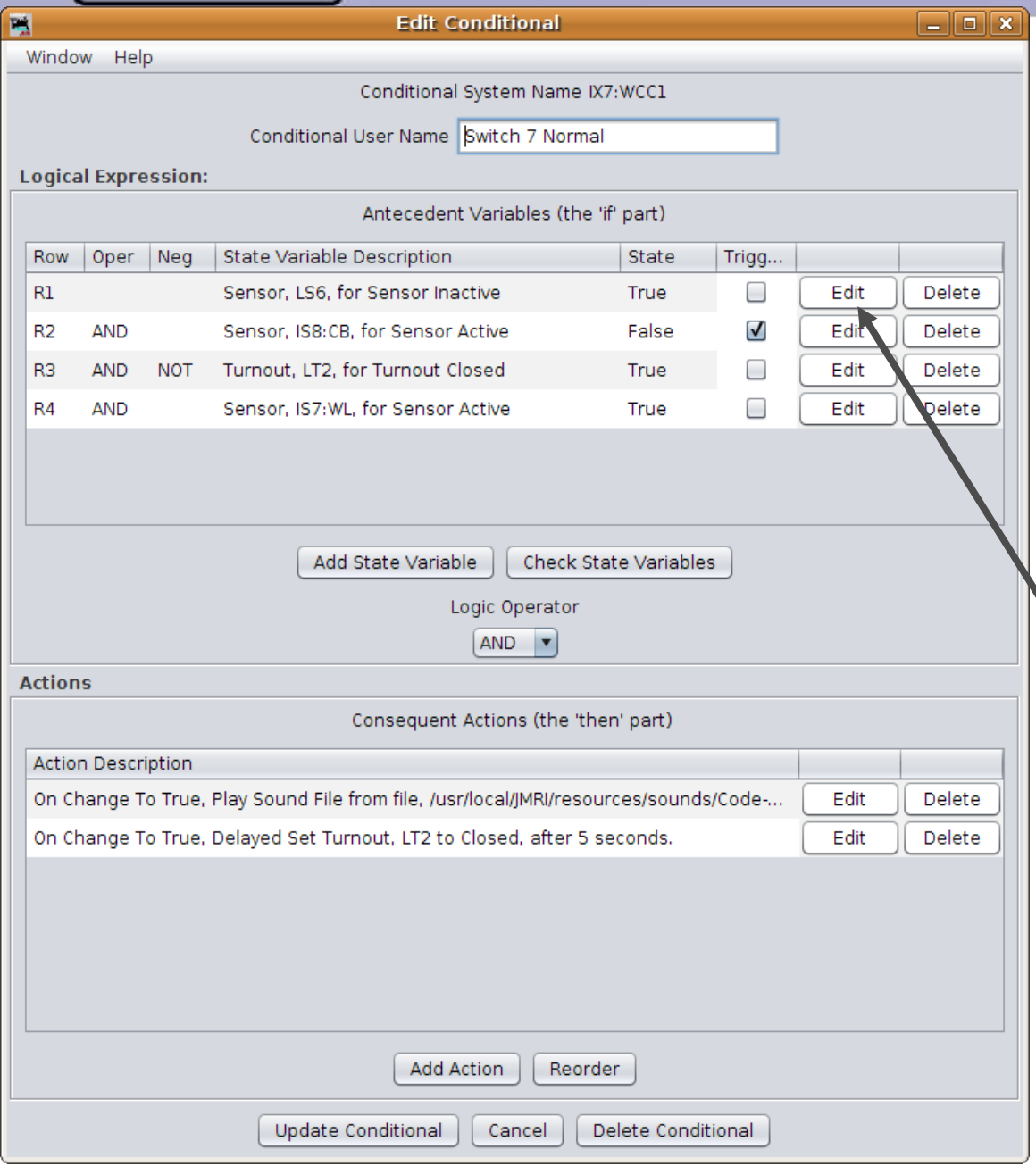

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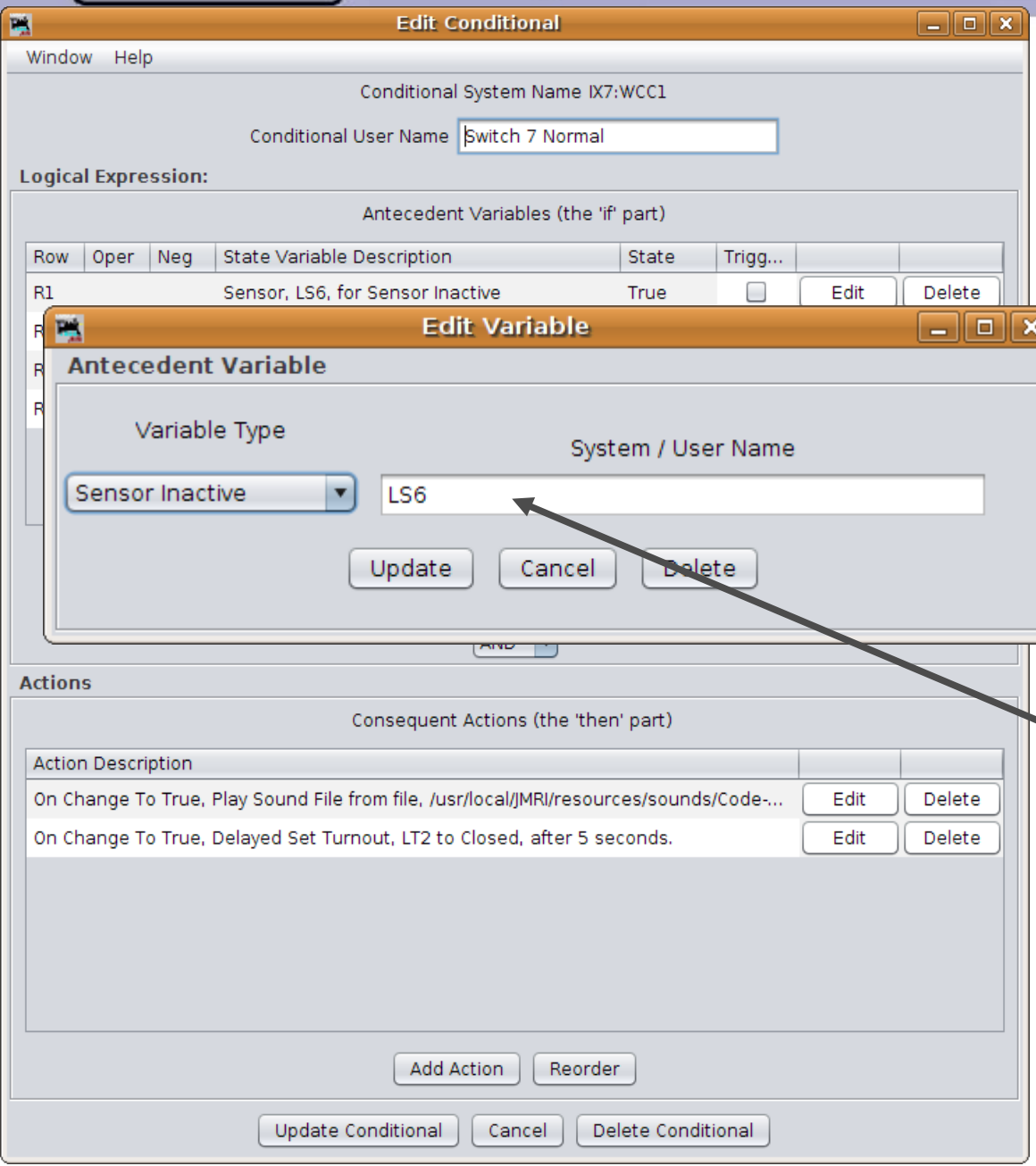

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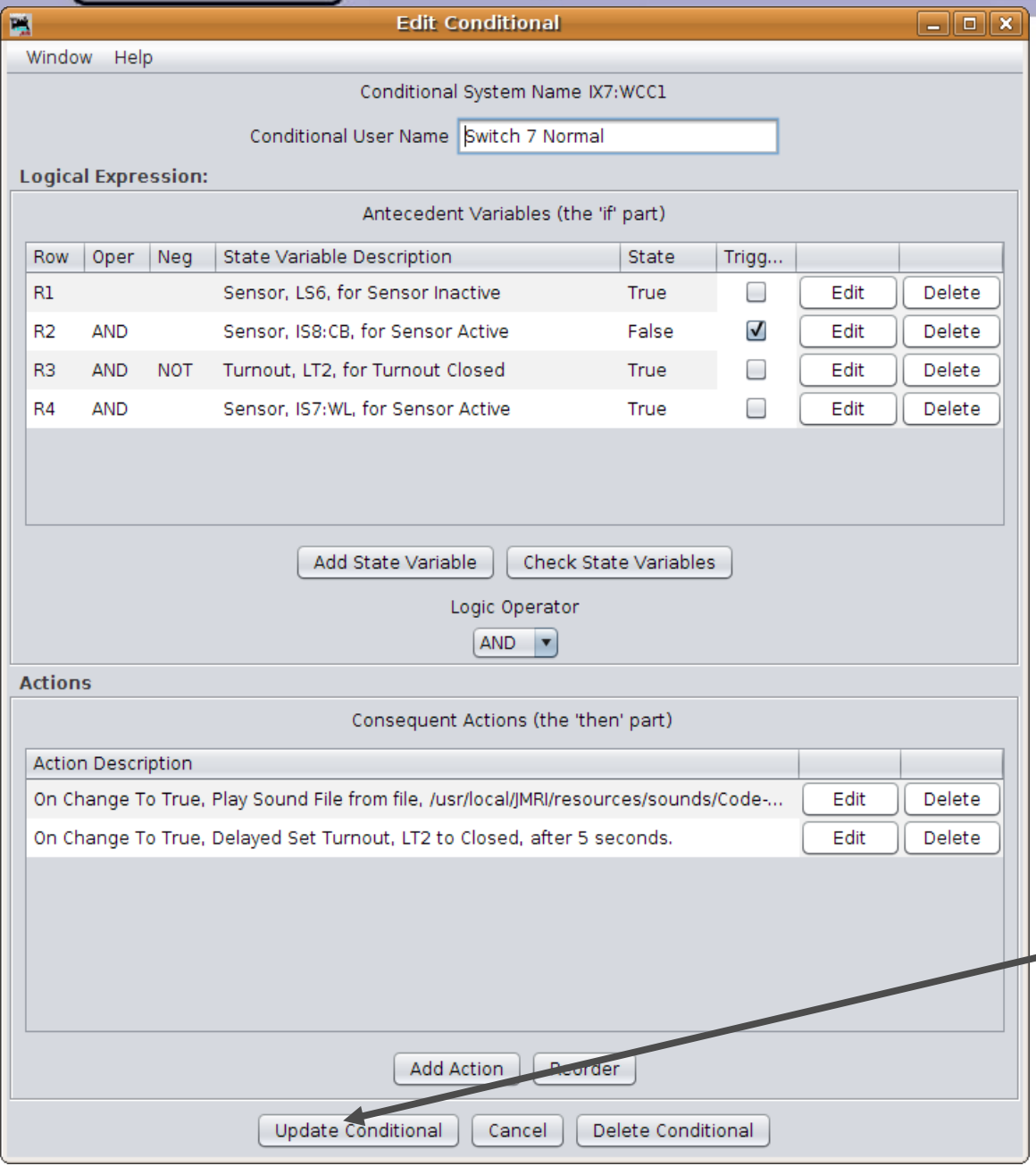
- In this case correct the sensor name for plant 7, then 'Update'.



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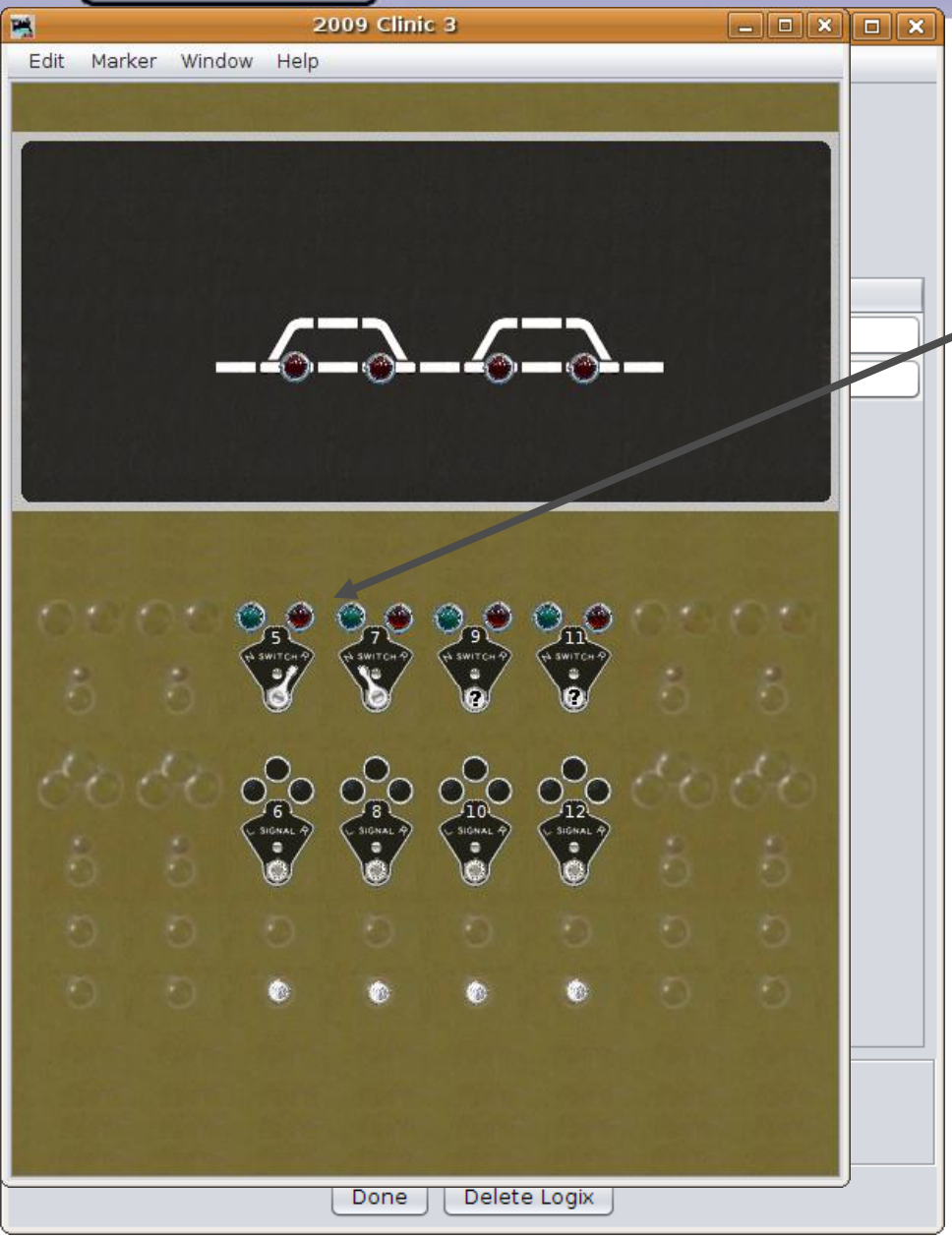
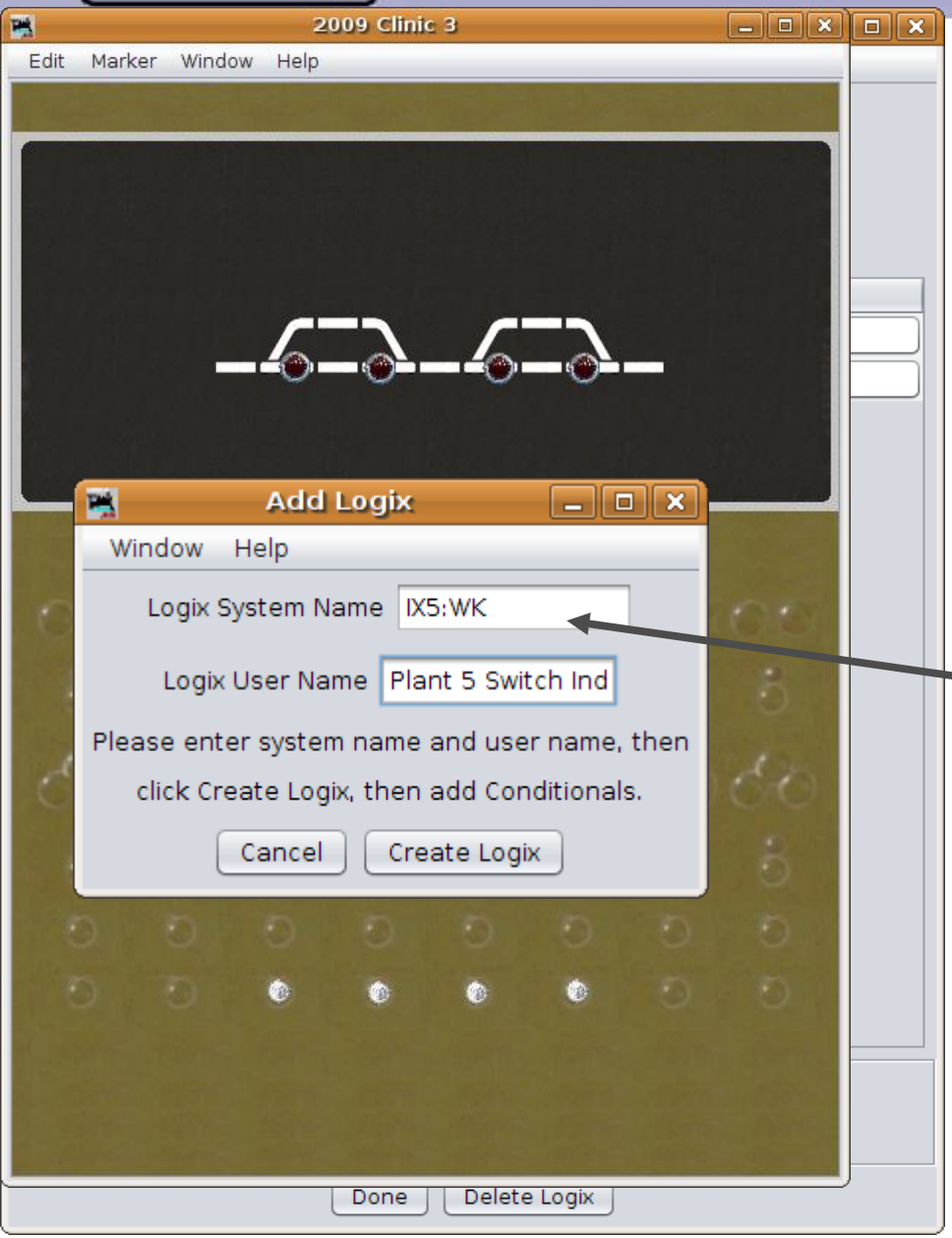
- Click Edit to change each line.
- In this case correct the sensor name for plant 7, then 'Update'.
- Click 'Update Conditional' and then 'Done' when all the copied conditionals have been changed to their new values.



Logix for Interface

- We left our last clinic with some Logix that couldn't be fully tested because we didn't have any visual turnout feedback.



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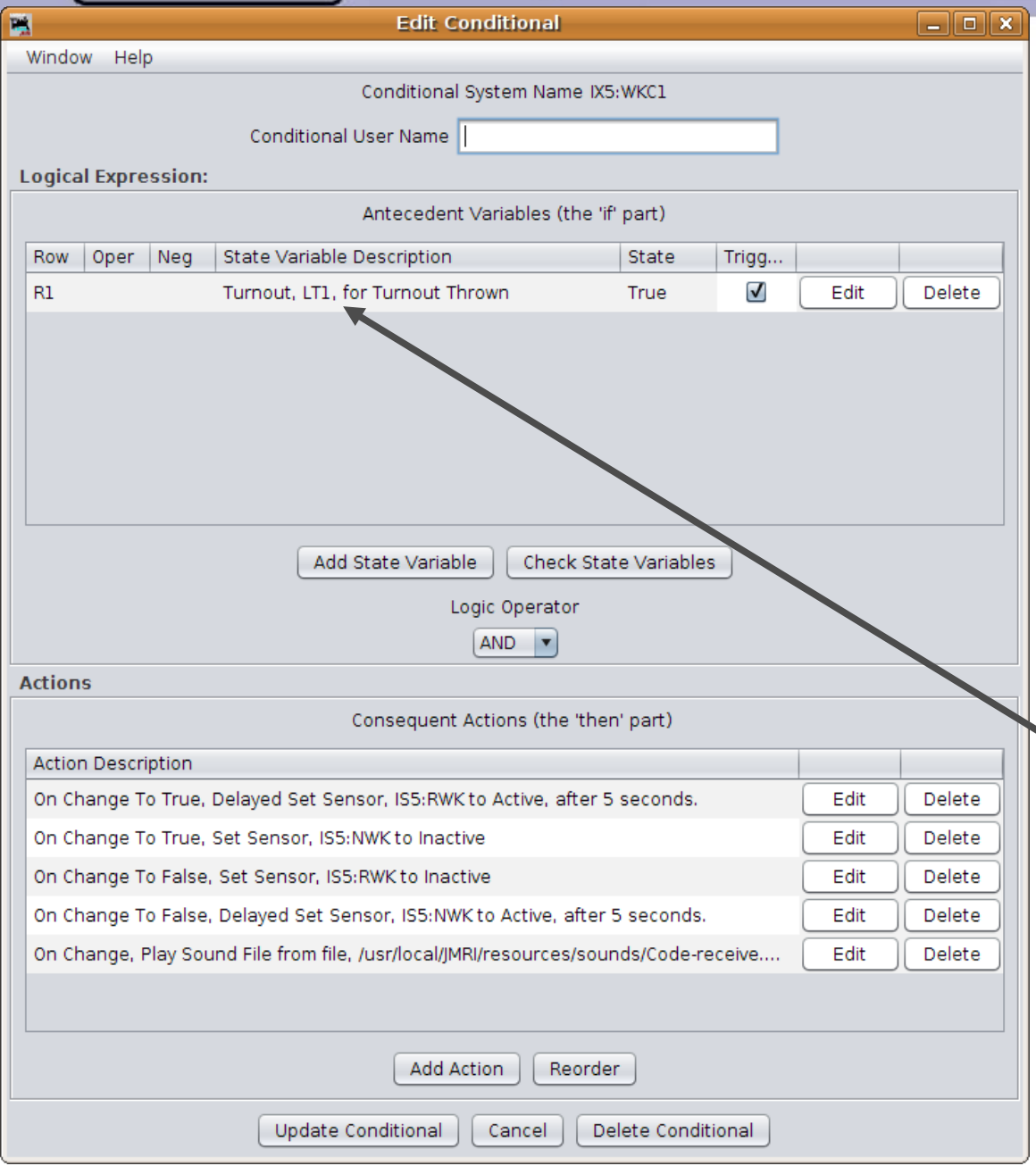
- Lets solve this by connecting the turnout state with the panel indicators, again with sound and delay. The Logix name is: IX5:WK (plant **5:**, s**W**itch, indi**K**ator)



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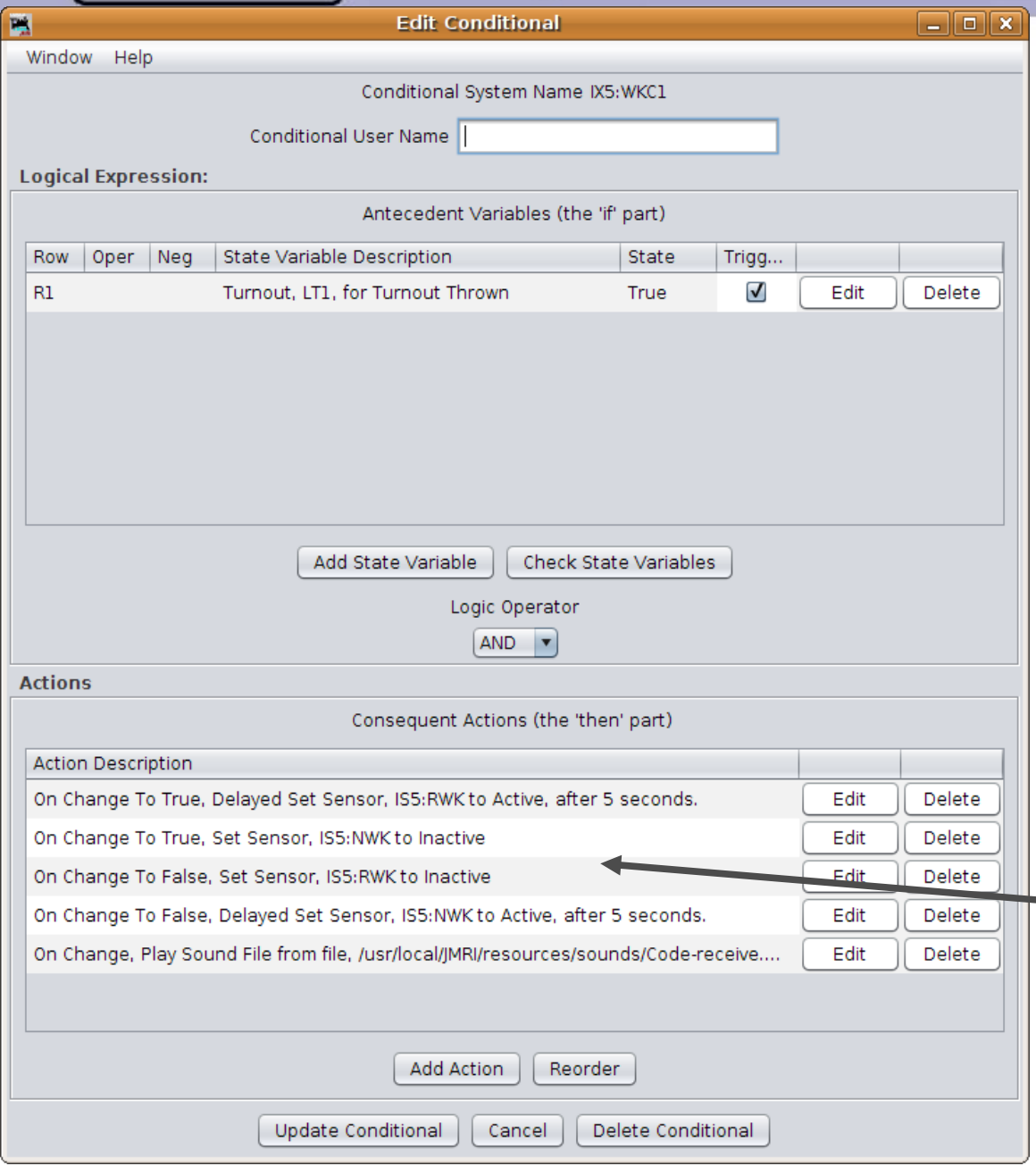

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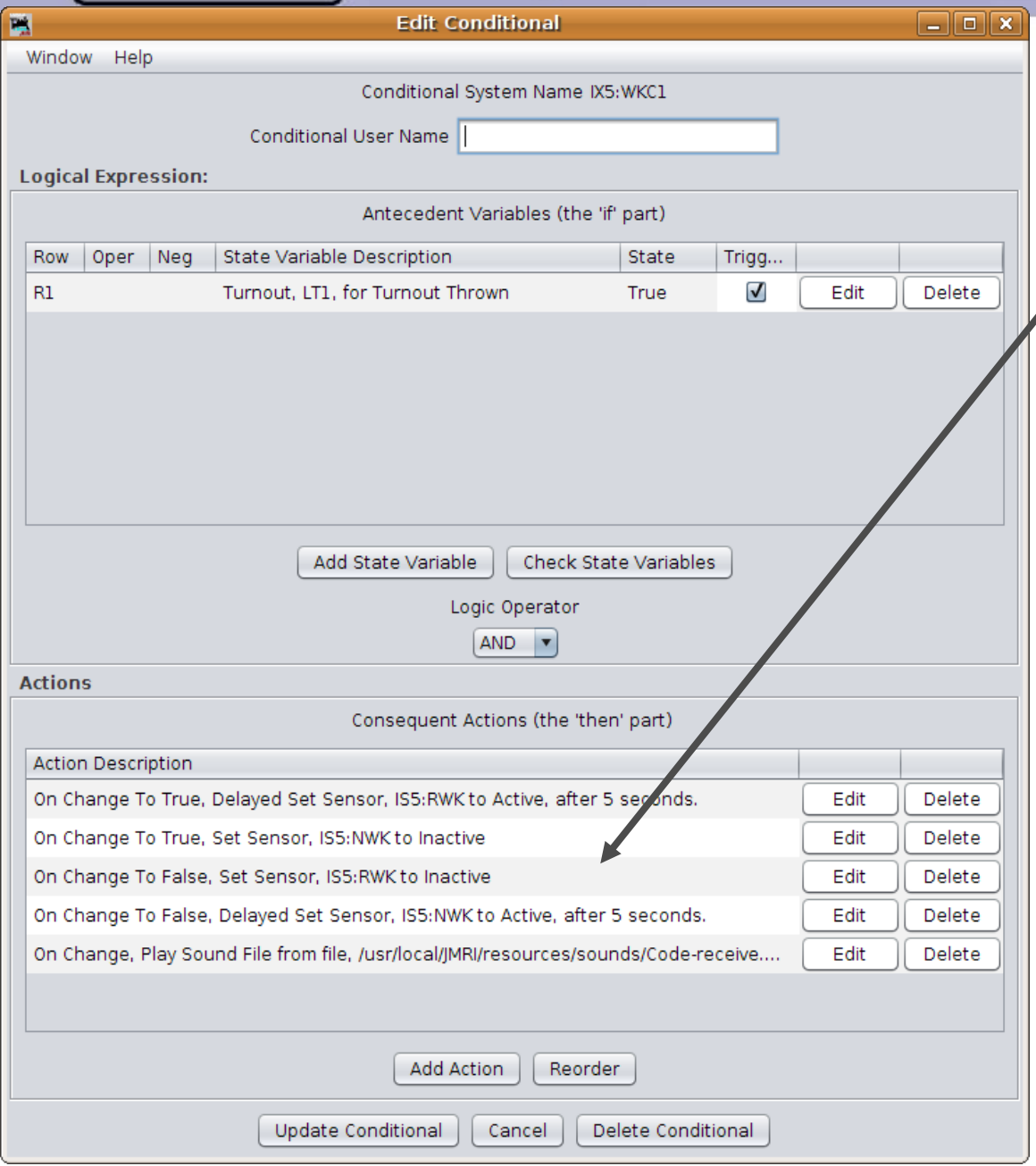
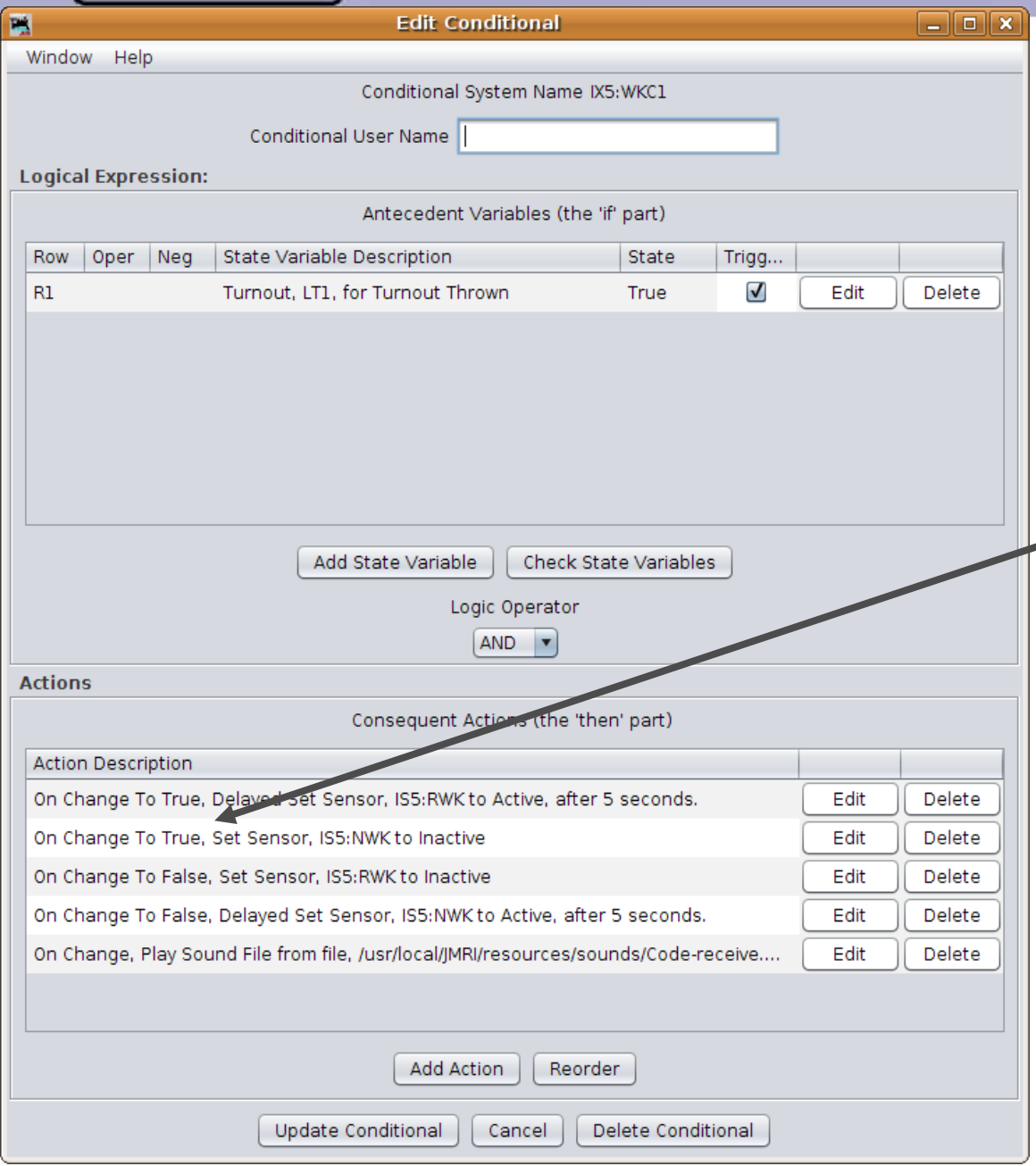
- This Conditional has only one variable, the turnout 'LT1'
- However it has lots of actions. New in 2.6 is the capability of having as many actions as we require, not just two as originally allowed.



Logix for Interface

- This change allows us to do all the required actions for both thrown and closed actions in one single conditional.



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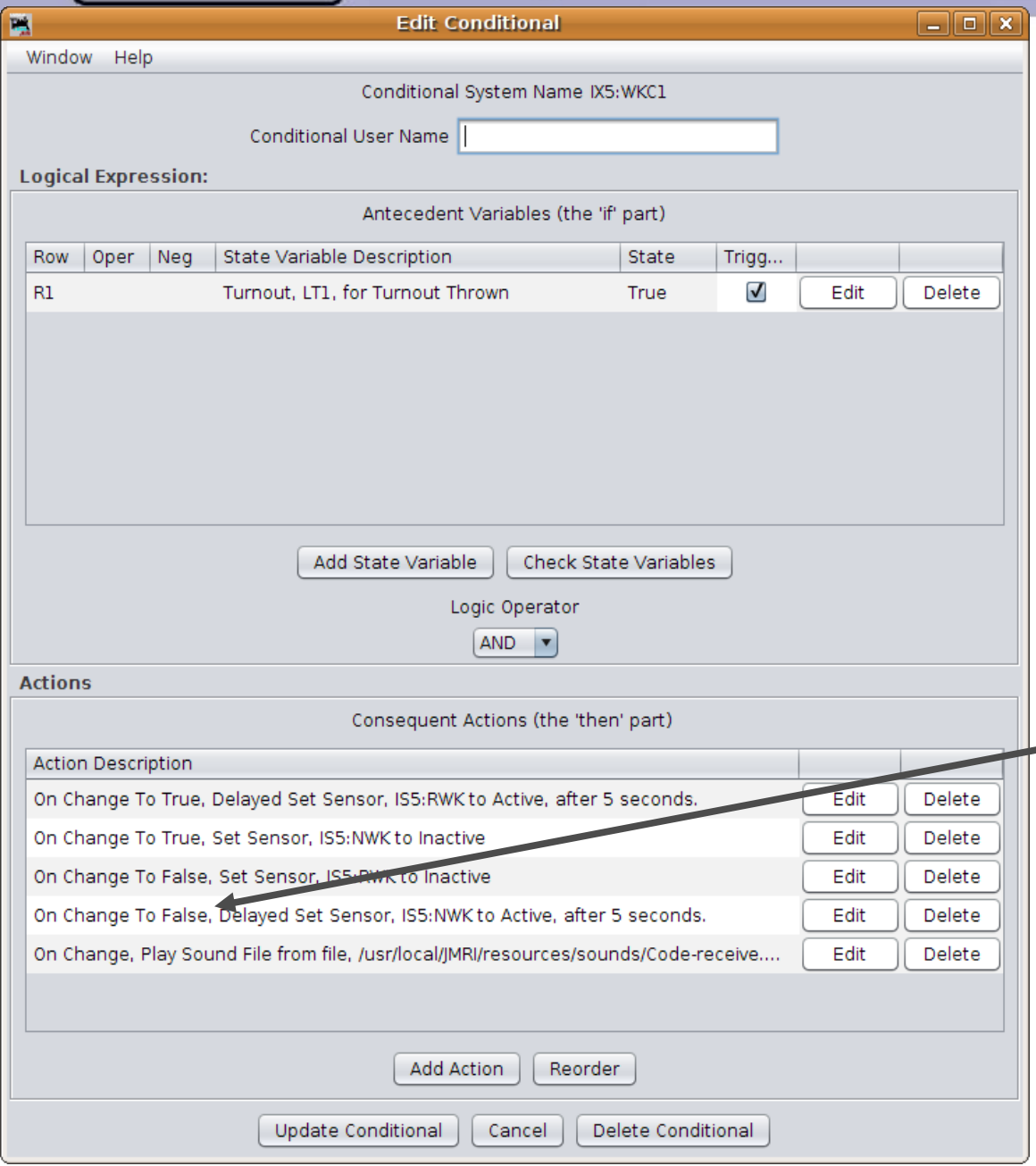
- First we do the actions that happen when the turnout is 'Thrown'. Turn off the 'N' lamp, then after 5 seconds turn on the 'R' lamp.



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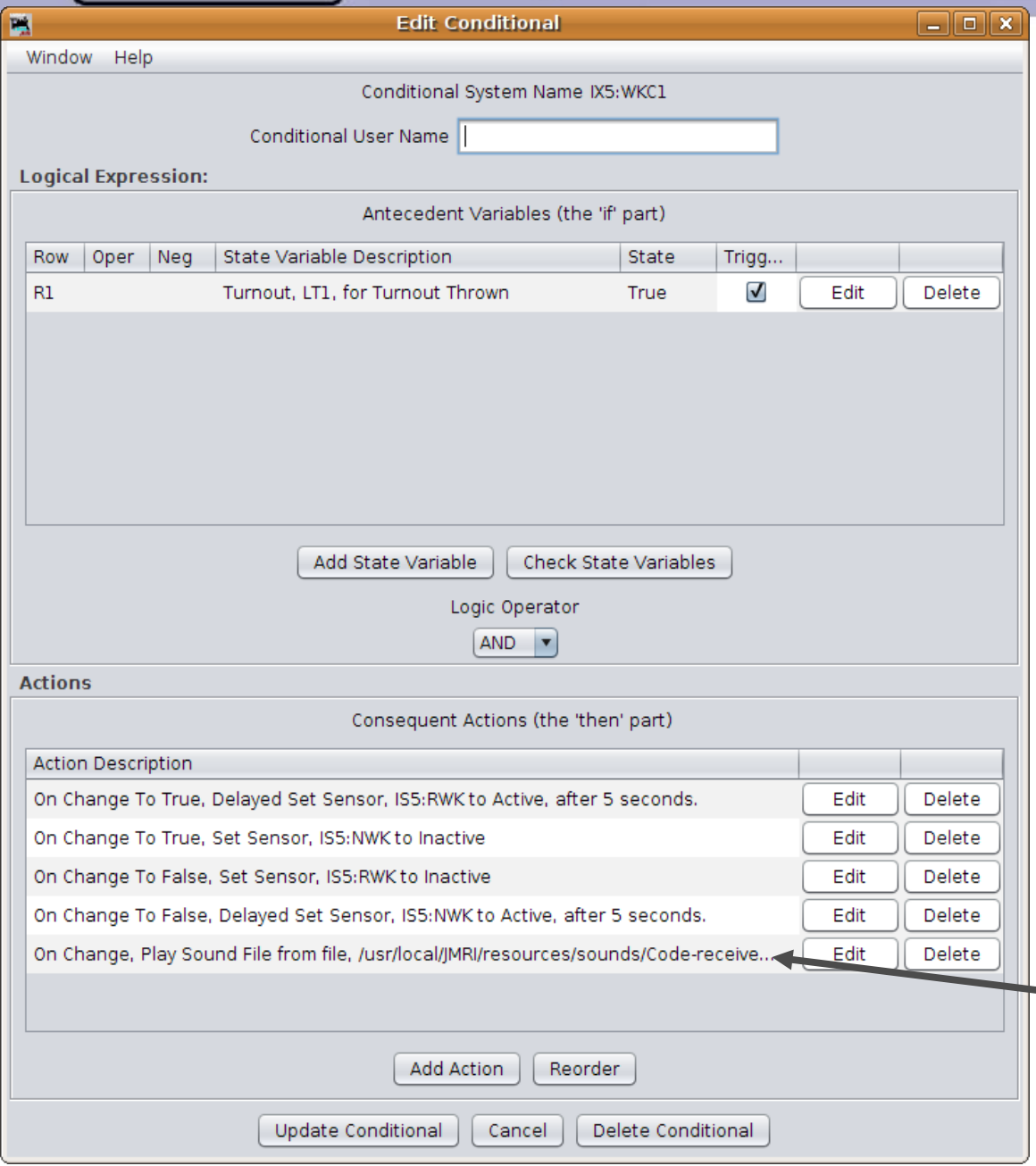
- First we do the actions that happen when the turnout is 'Thrown'. Turn off the 'N' lamp, then after 5 seconds turn on the 'R' lamp.
- Next we do the actions when the turnout is 'Un-thrown' (Closed). Turn off the 'R' lamp, then after 5 seconds turn on the 'N' lamp.



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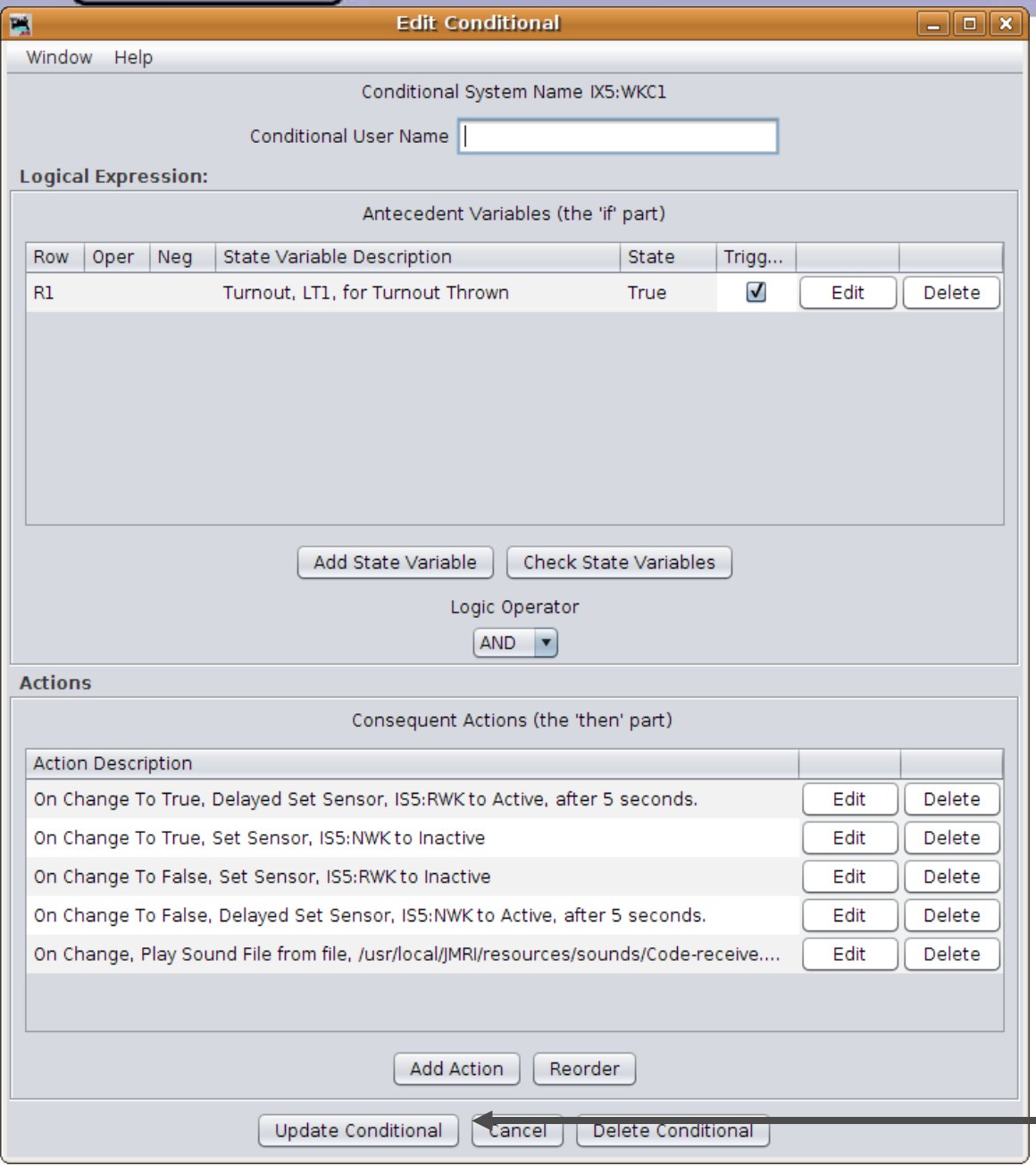
- Finally we do the actions that happen on any change. i.e. play the 'Sound of relays.'



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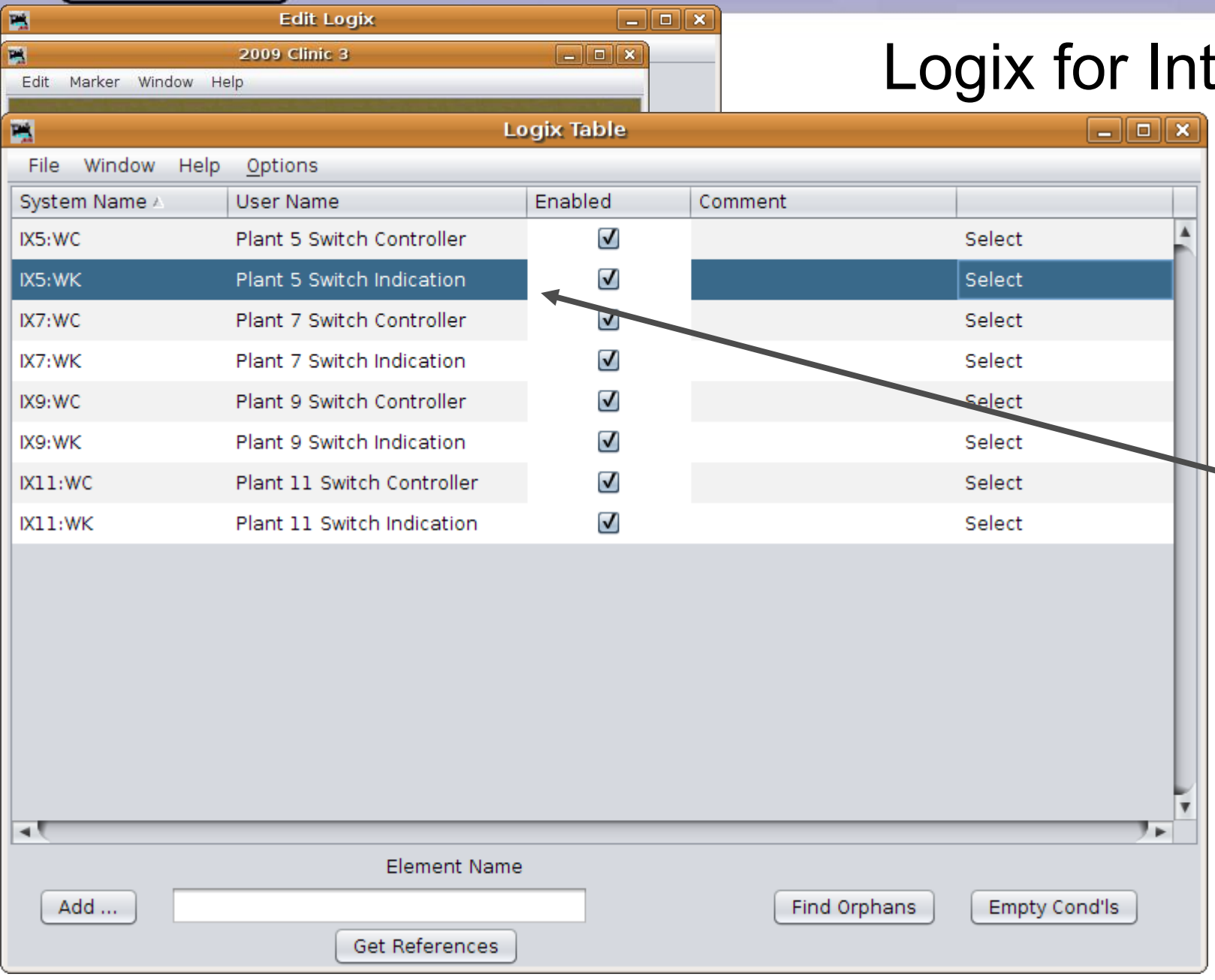
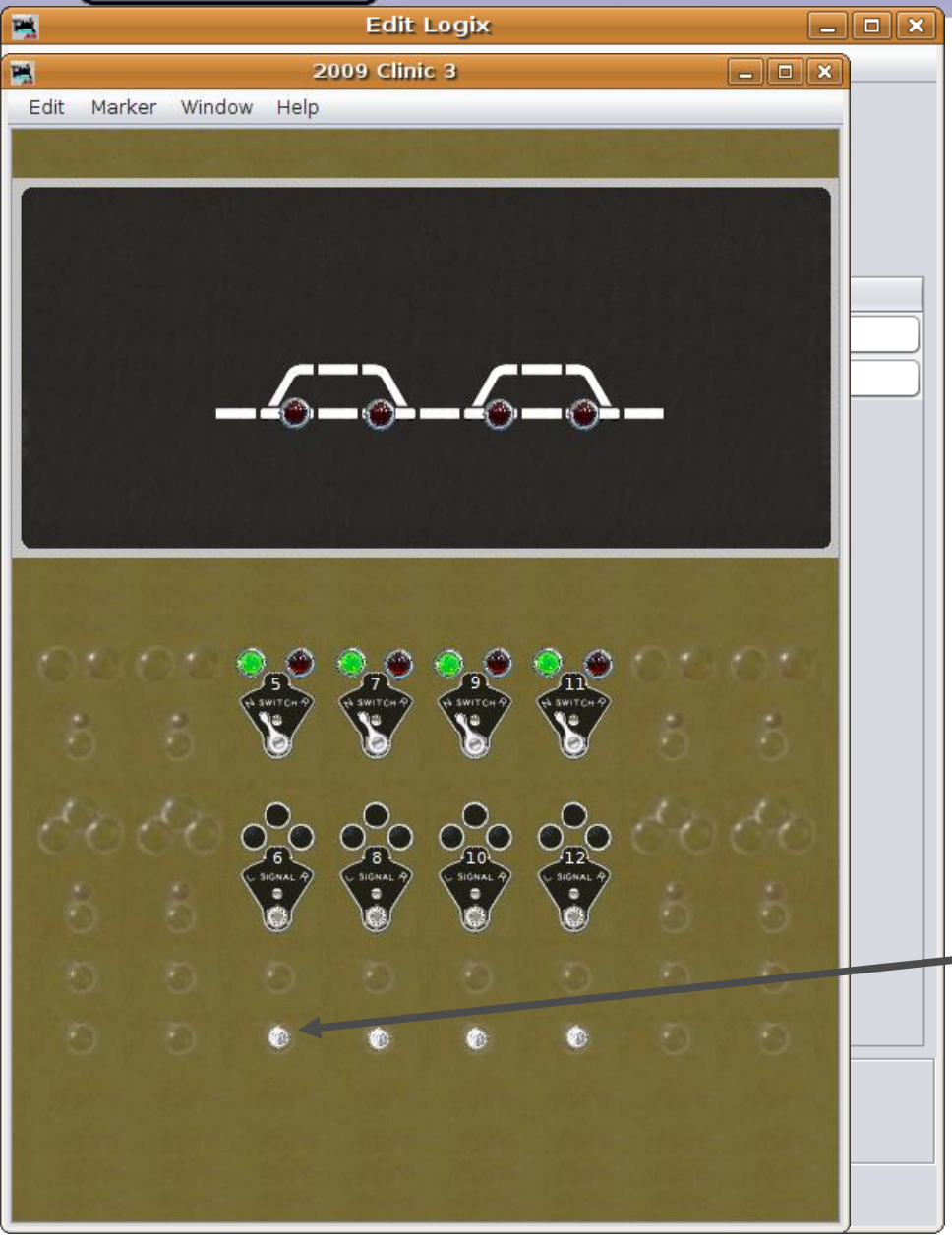
- 'Update Conditional' to finish.

Logix for Interface

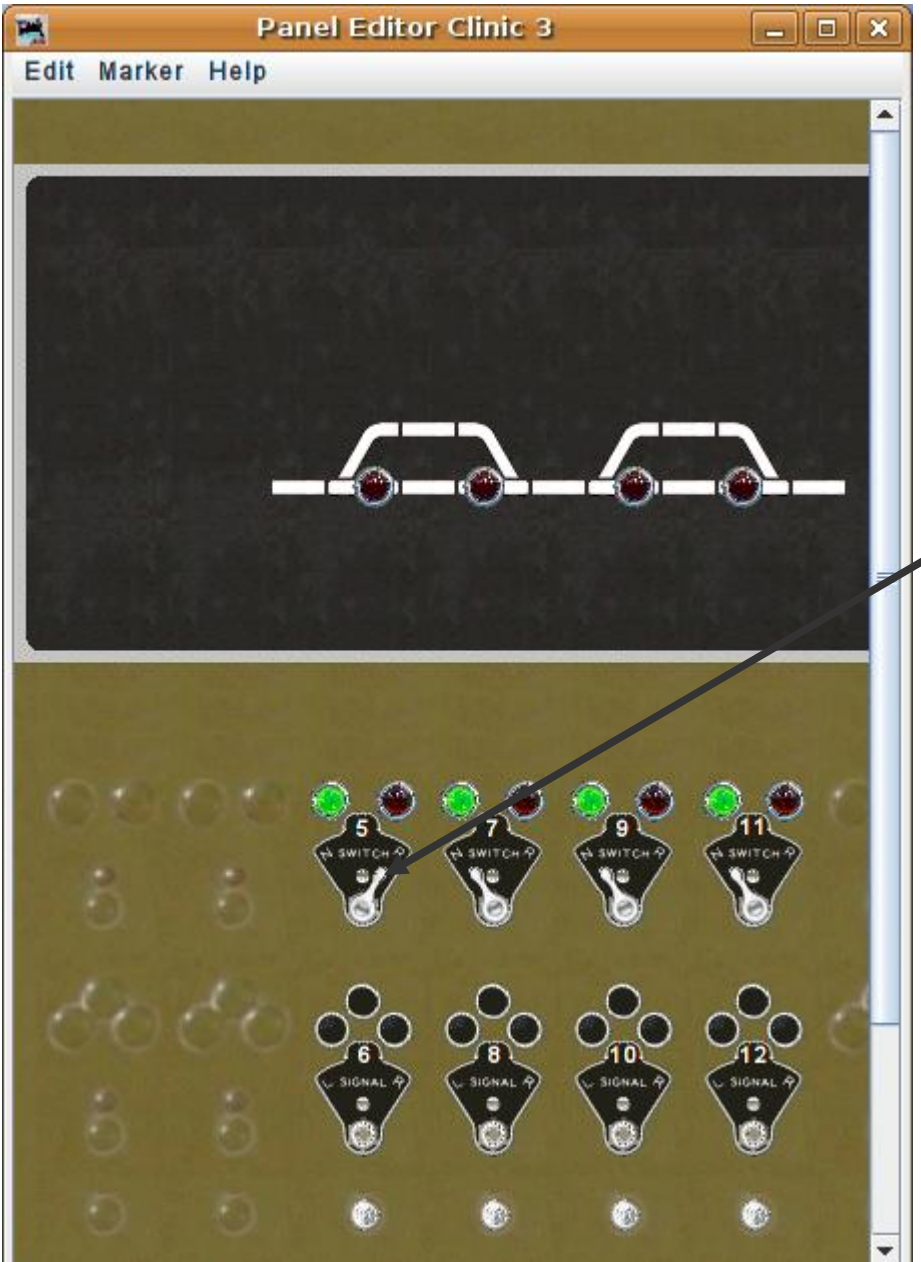


- Now after using the 'Copy' option and editing to match our panel items, we have sound and light for each position.



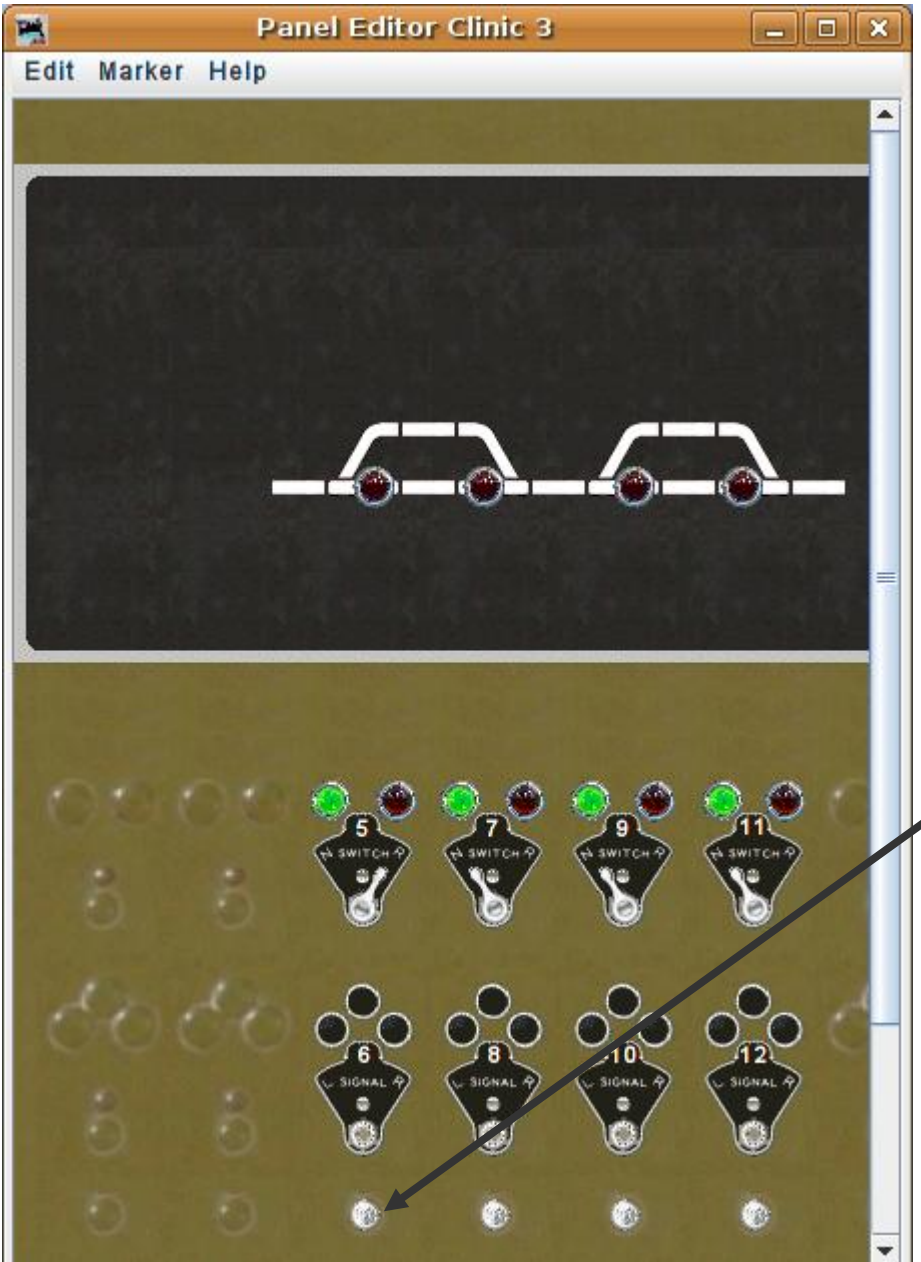
Logix for Interface

- Now after using the 'Copy' option and editing to match our panel items, we have sound and light for each position.
- Quick tests show that the panel now has animation and sounds, as well as basic interlocking.



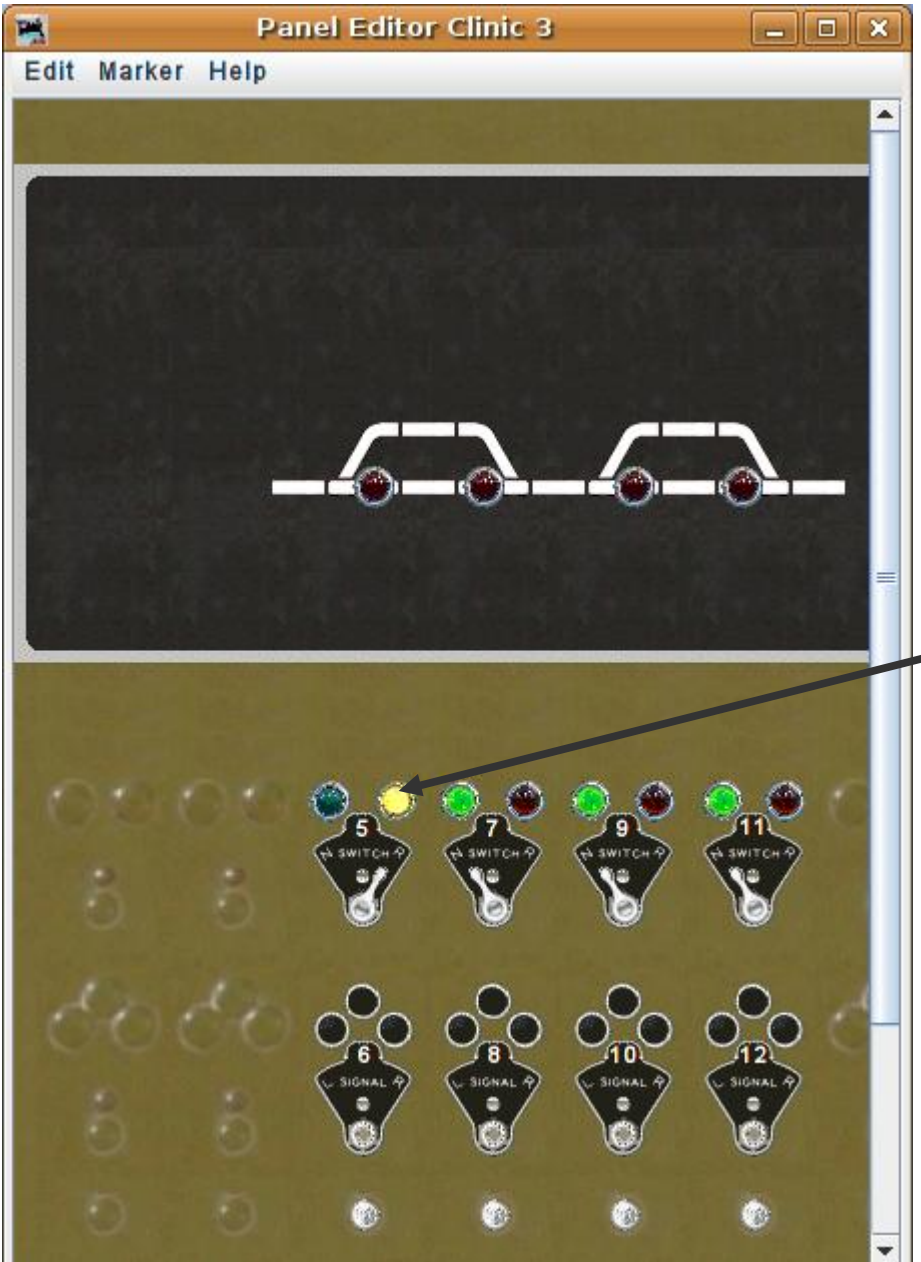
Logix test

- Now change the lever.



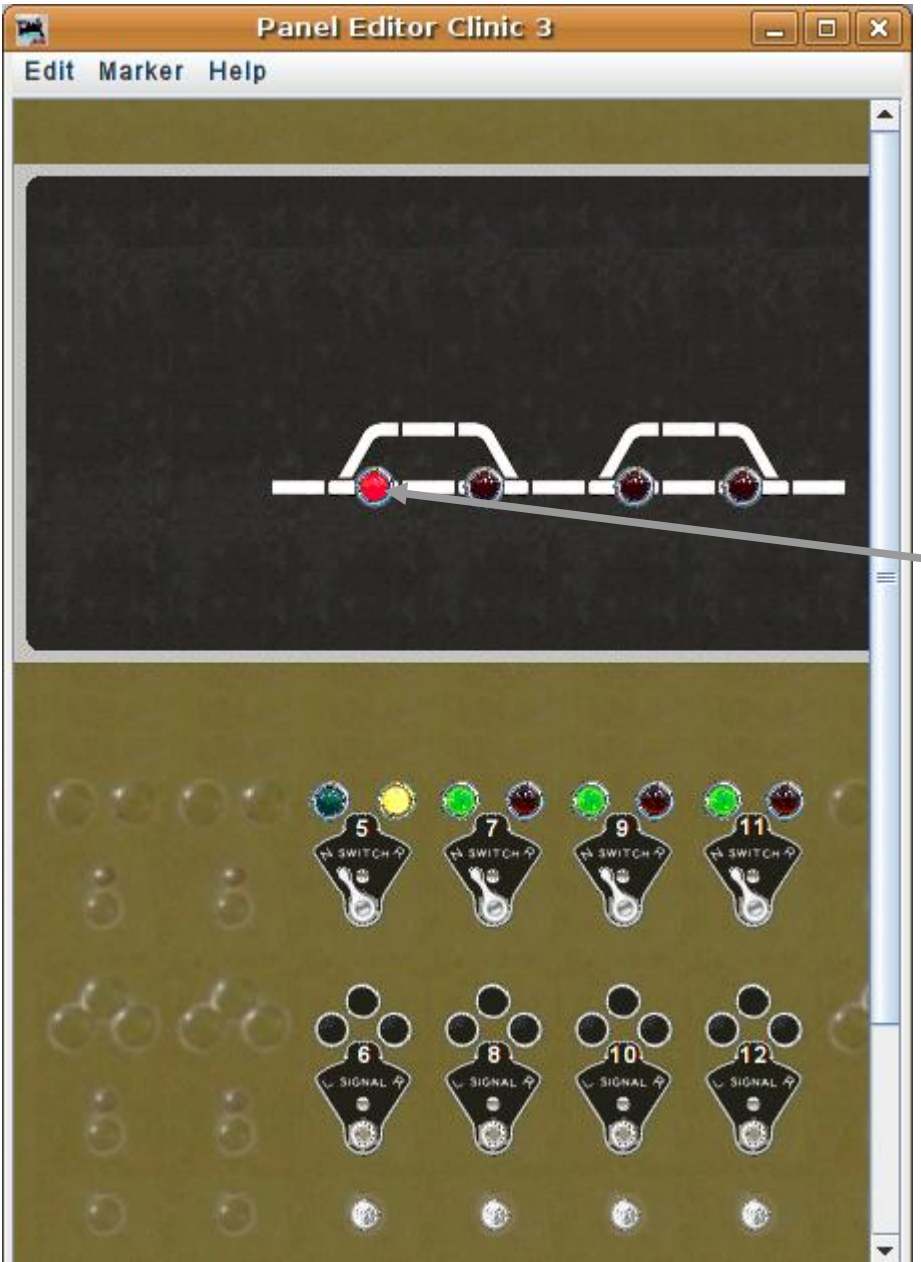
Logix test

- Now change the lever.
- Push the Code Button.



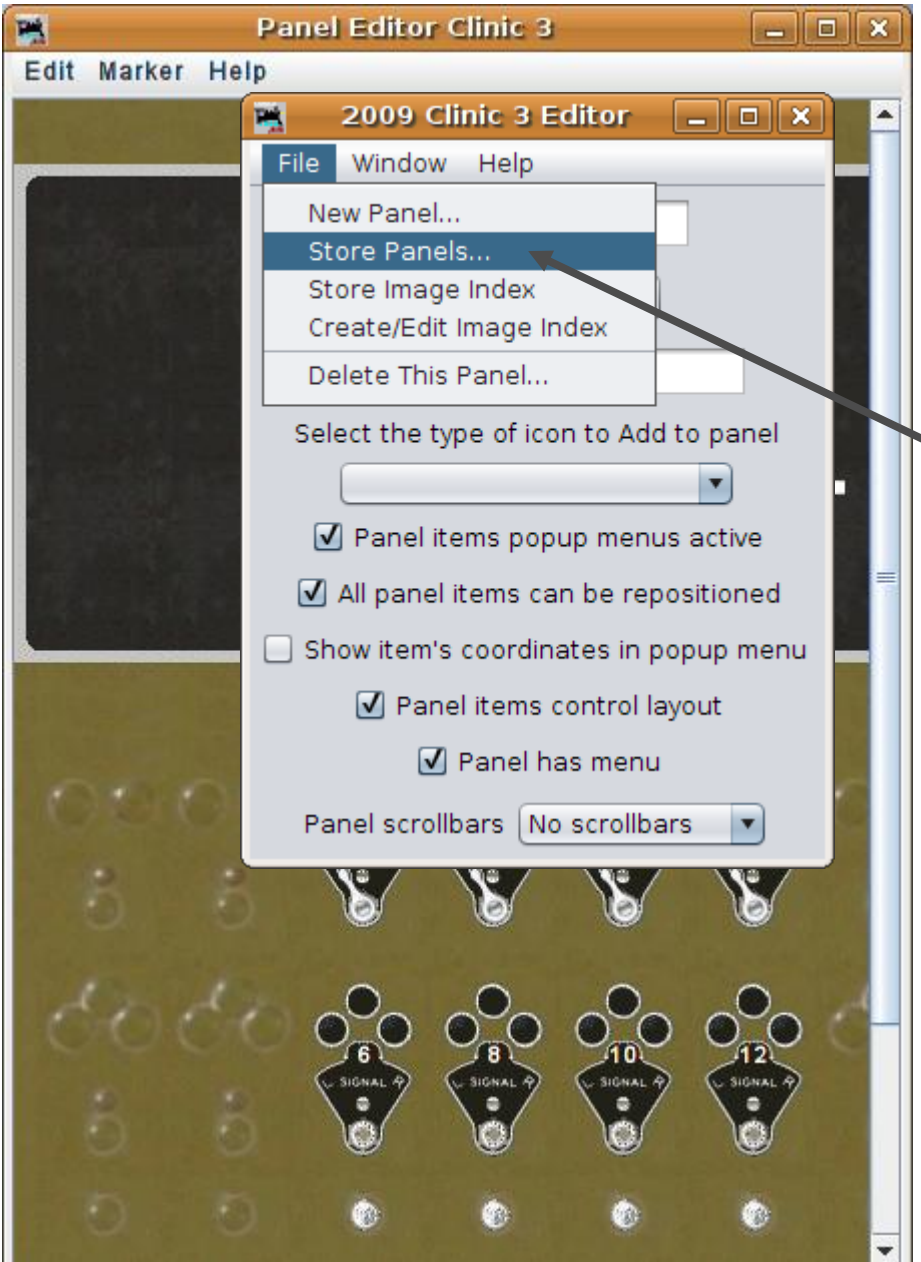
Logix entry

- Now change the lever.
- Push the Code Button.
- And Our turnout changes.



Logix entry

- Now change the lever.
- Push the Code Button.
- And Our turnout changes.
- But not if the OS shows occupied.



Logix entry

- Now change the lever.
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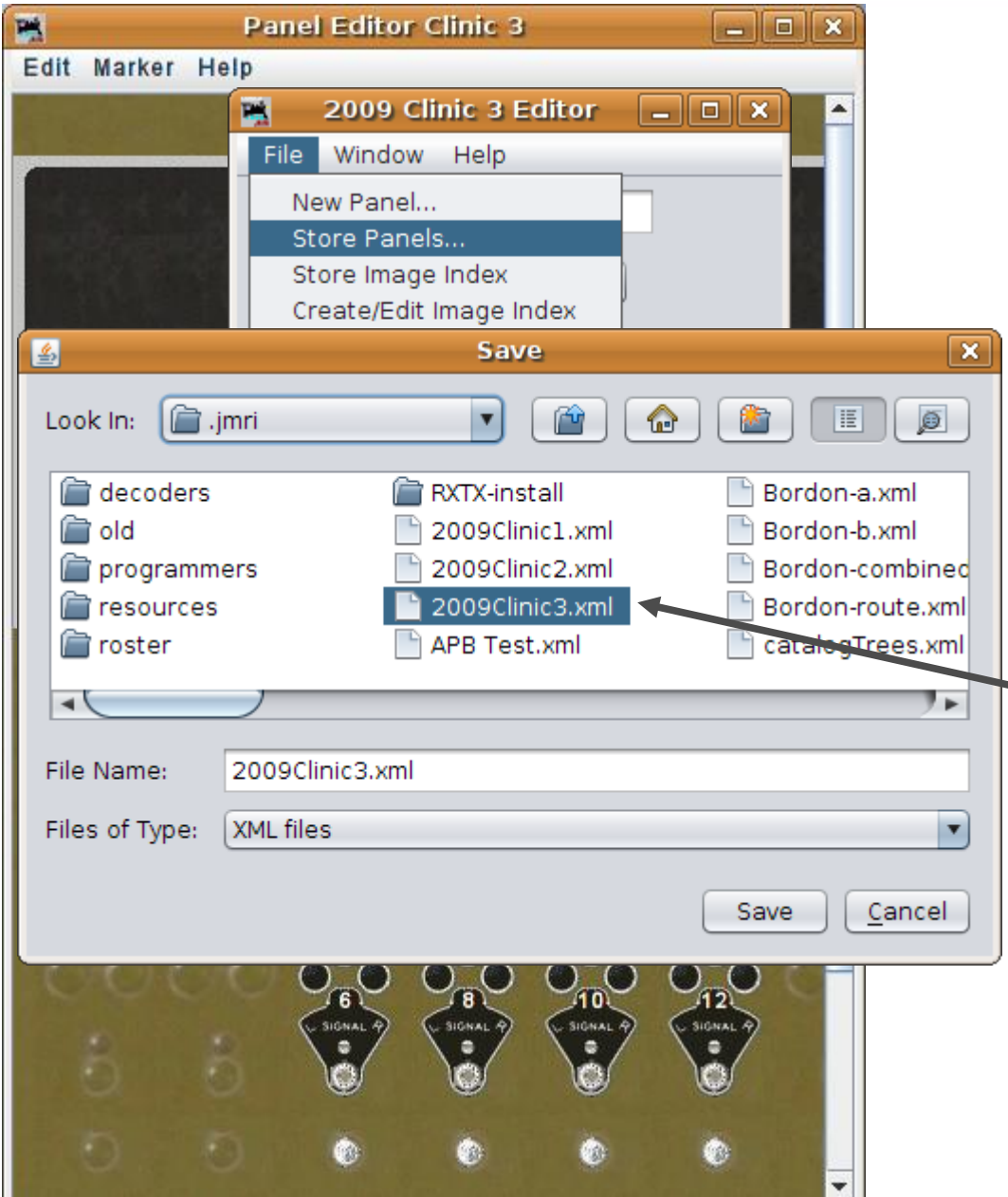
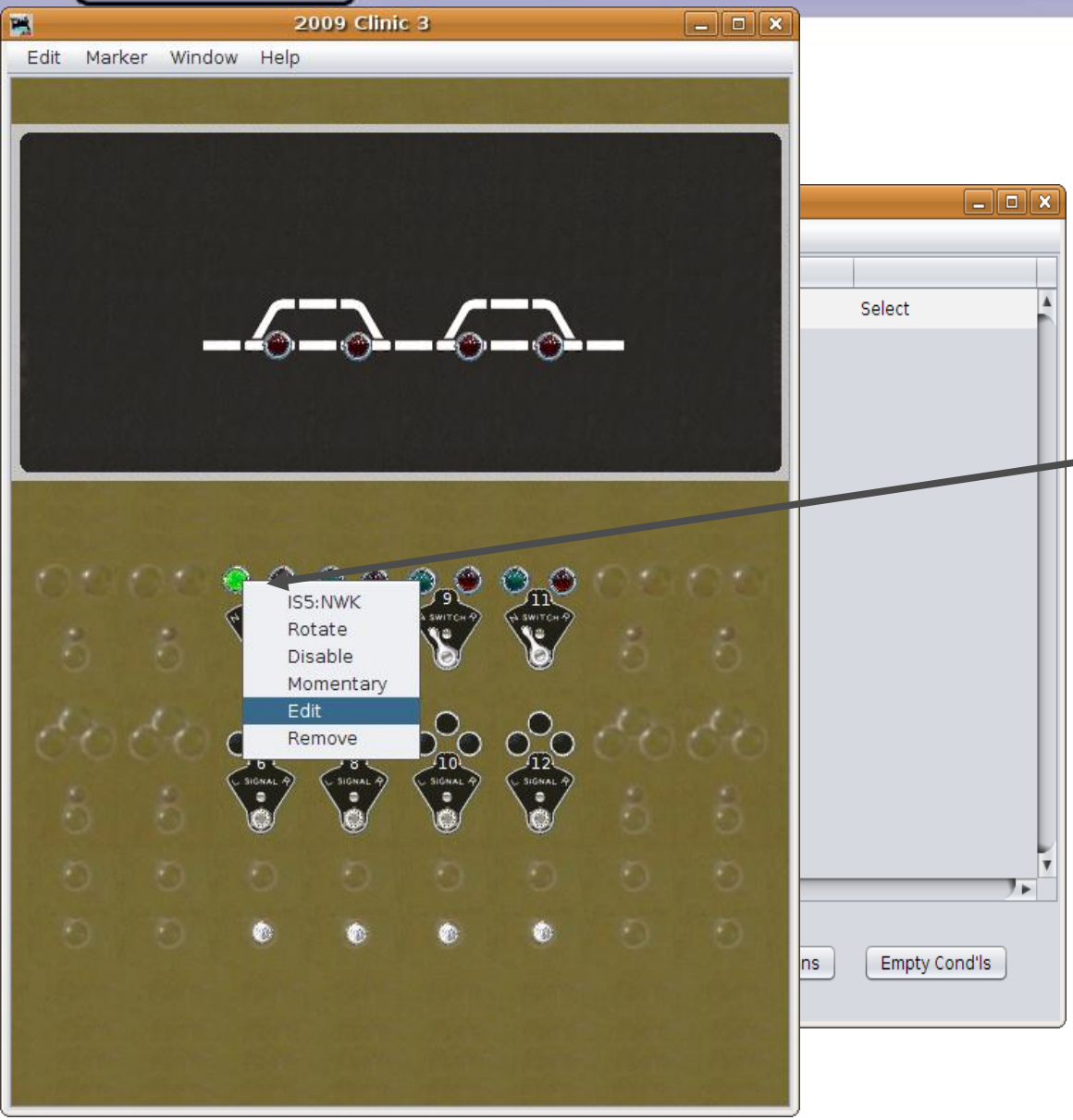


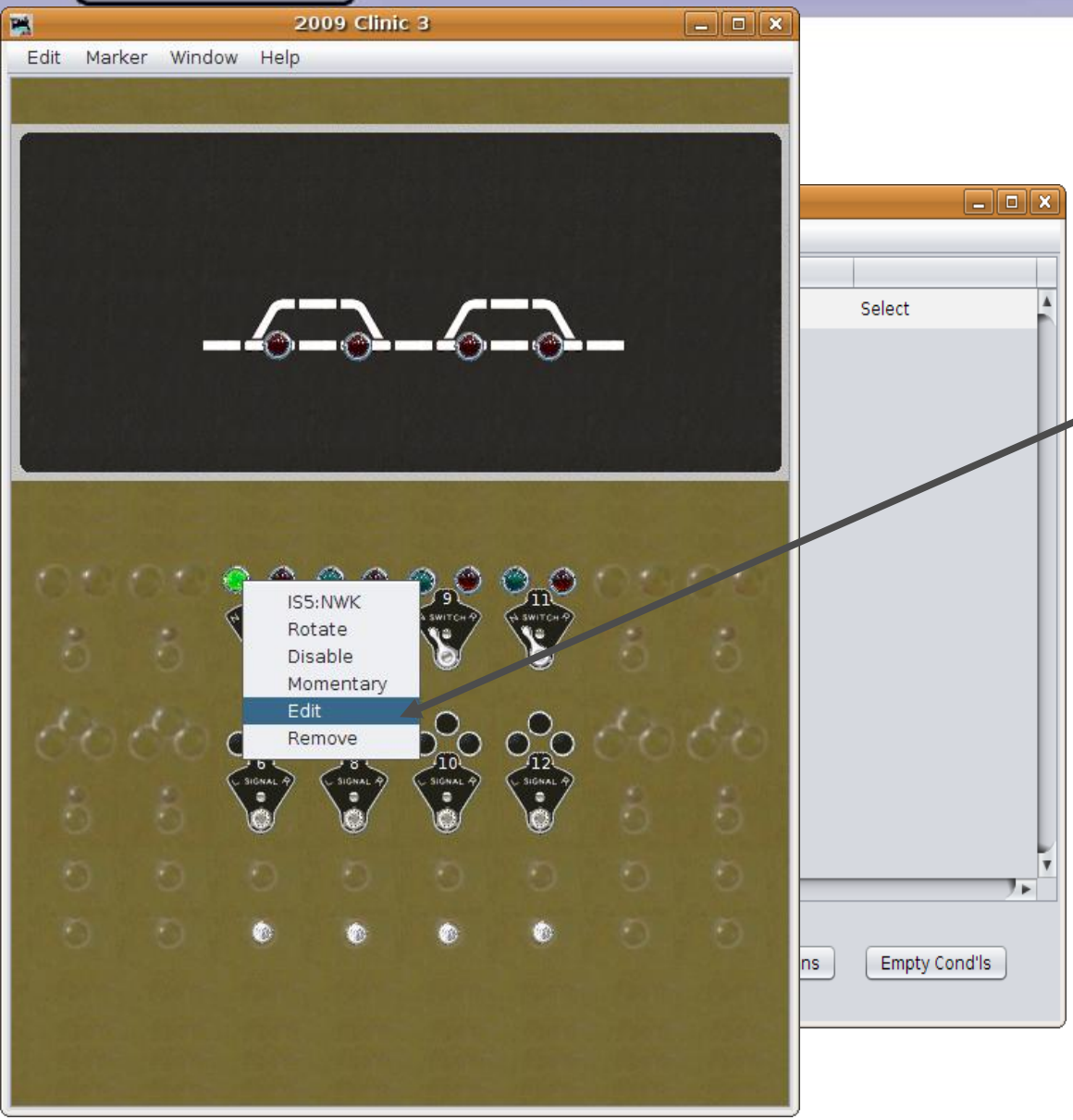
Logix entry

- Now change the lever.
- Push the Code Button.
- And Our turnout changes.
- But not if the OS shows occupied.
- Save our work.
- As 2009Clinic4.xml



Icon editing

- Also new in 2.6 is the ability to graphically edit the icon data. Right click on an icon to bring up its popup menu.



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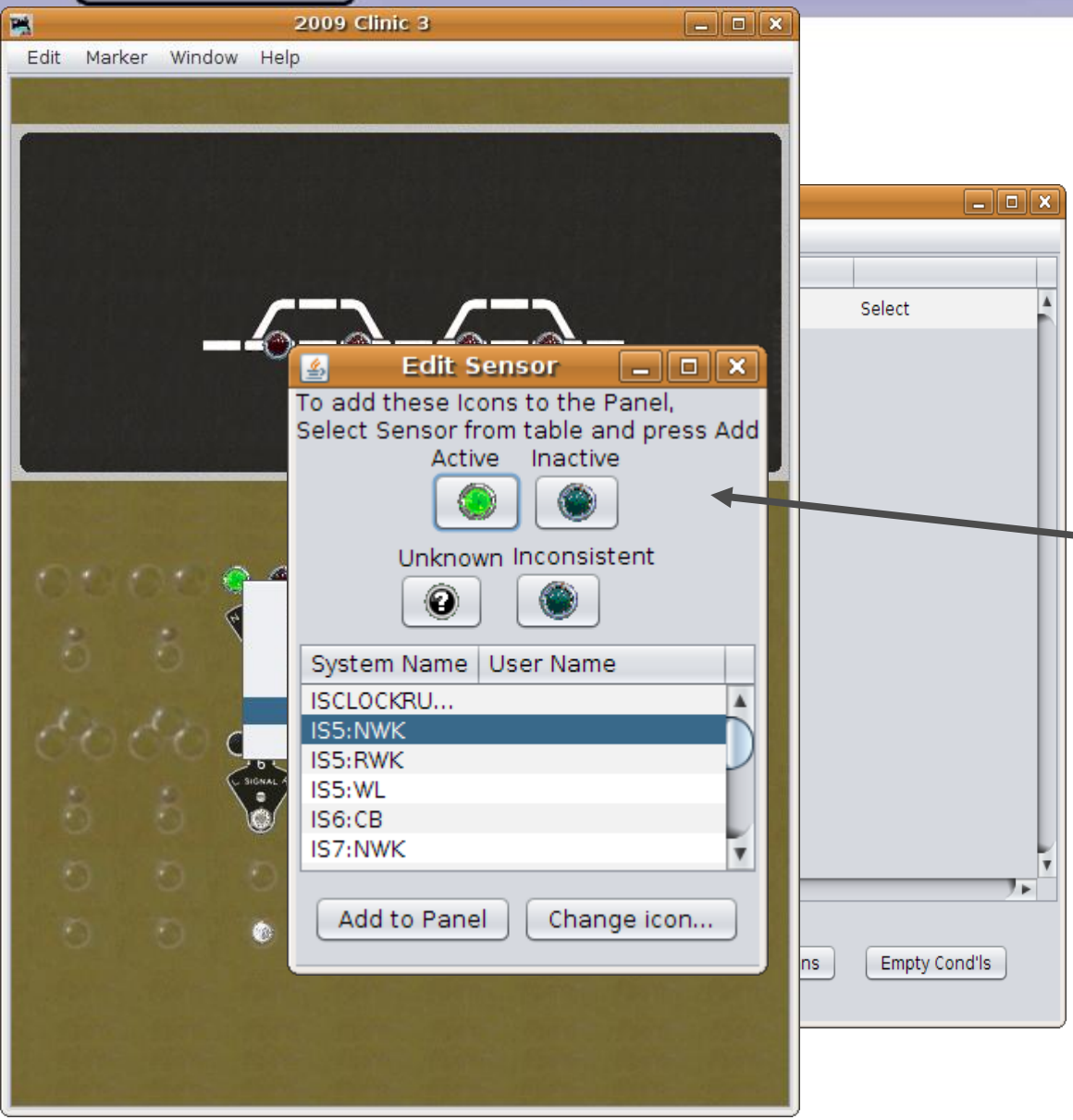
- Click on 'Edit'



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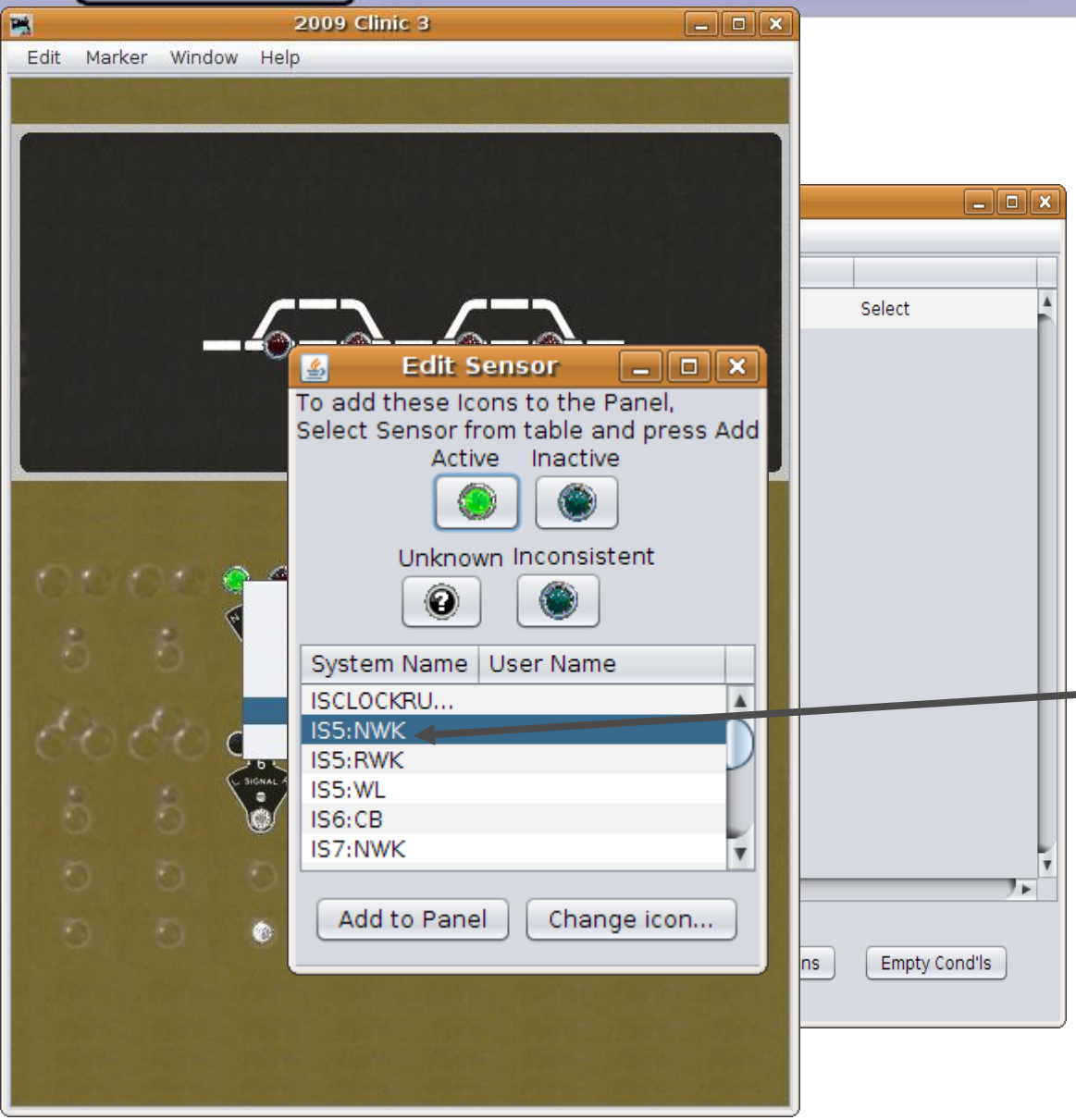
- Click on 'Edit'
- This opens the 'Edit Sensor' window.



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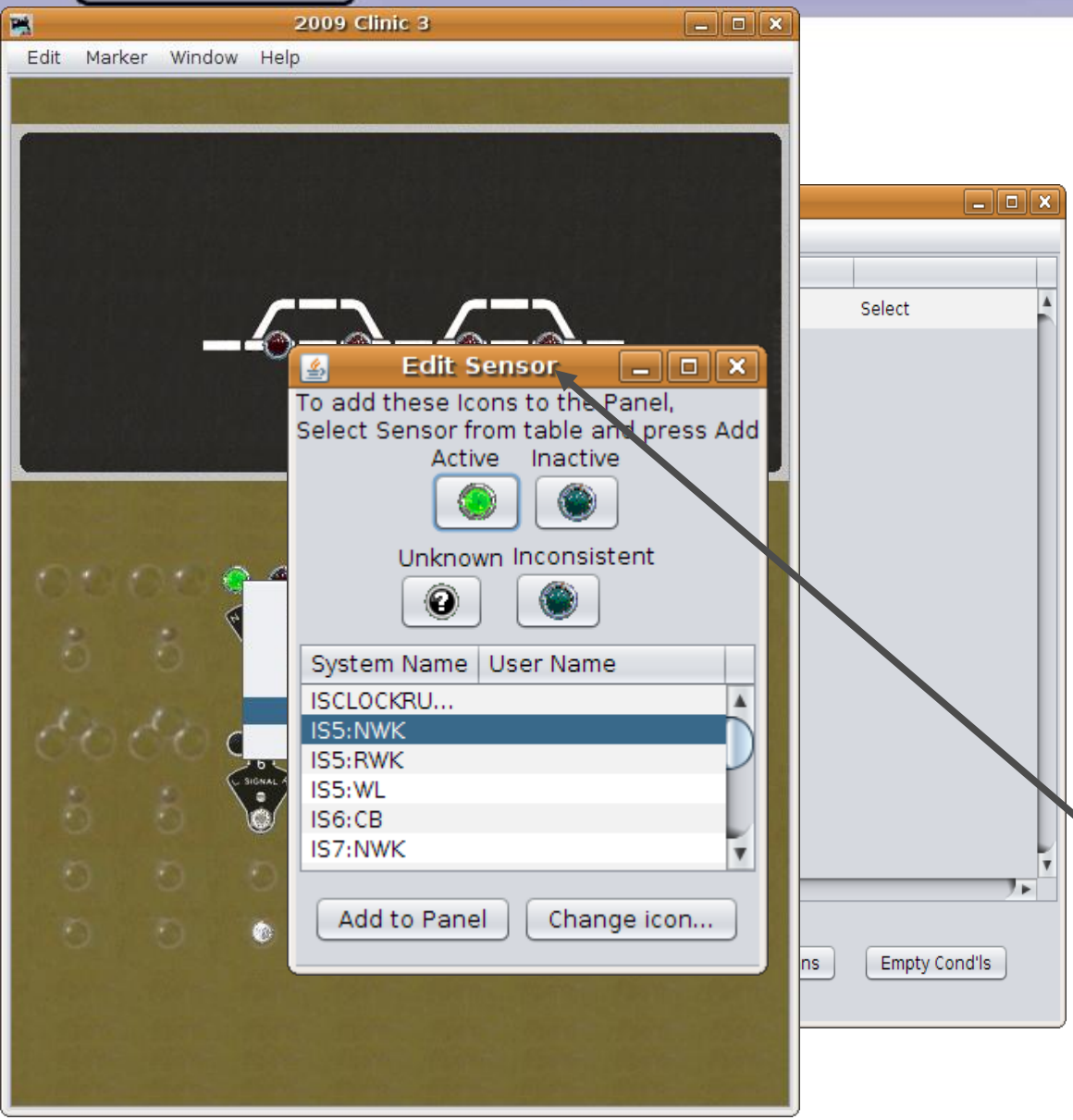
- You may change the icon images or re-connect the sensor to a different sensor number.



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- This opens the 'Edit Sensor' window.
- You may change the icon images or re-connect the sensor to a different sensor number.
- You may not change the icon type. For that drastic a change you must delete the old and add the new type.

Manual Editing

- In the last section we created the 2nd, 3rd, and 4th sections of our panel by using the new 'Copy' function of the Logix, then correcting individual values as required.
- The same thing could have been accomplished manually using an XML text editor with copy and replace. However, this requires a detailed understanding of the .XML file format, and is error prone.

Manual Editing

- Another reason to use manual editing has been to edit icon information that needs to be changed without completely re-entering them.
- Again the current version 2.6 has new features that can help by providing graphical editing of icon data.
- If you still require the ability to do manual editing of the .XML files the following may be helpful.

XML Editing

- Manual editing of the Panel.xml files.
  - Select an editor that will NOT reformat your files.
  - Select an editor that does NOT think it automatically knows how to edit any file with a .xml extension.
  - For Windows users, 'XML Marker' available from http://symbolclick.com/ is an excellent option.
  - On Linux I am use Bluefish which is a standard programming editor with a cute logo.

XML Editing

- What we have covered so far:
  - Basic manual editing of the panel .xml file.
- Where we are going next:
  - Simple Signal Logic (SSL-clinic-2)