

# Cognex Designer Standard – Section 3

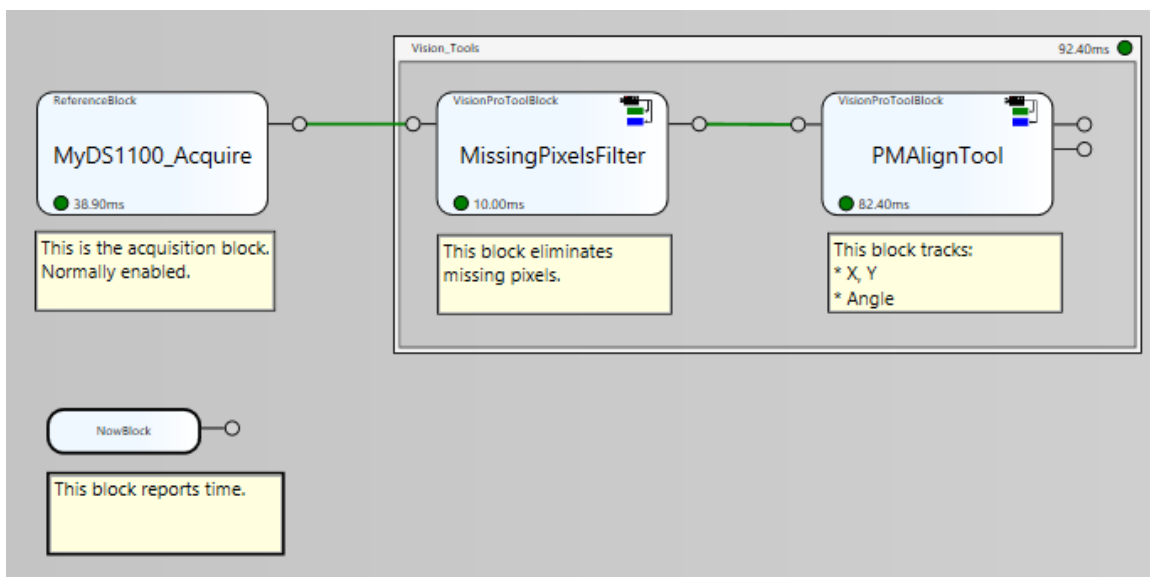
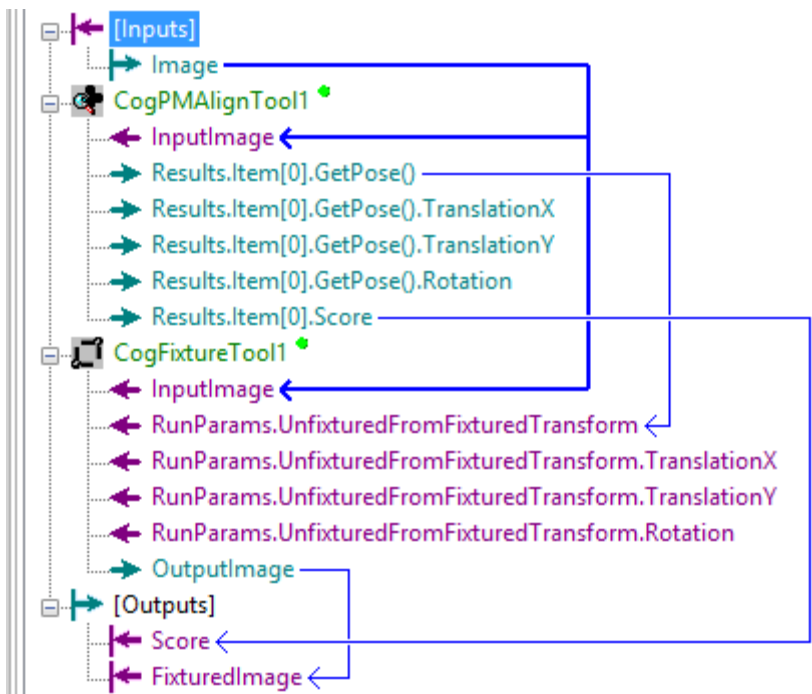
## Fixturing Lab

Approximate Duration: 30 minutes

### EXPECTED OUTCOMES:

- Open and use a simple Sequence
- Use PatMax tool to fixture a 3D inspection to compensate for part presentation variations

### EXPECTED VISUAL RESULT:



## OUTLINE OF LAB:

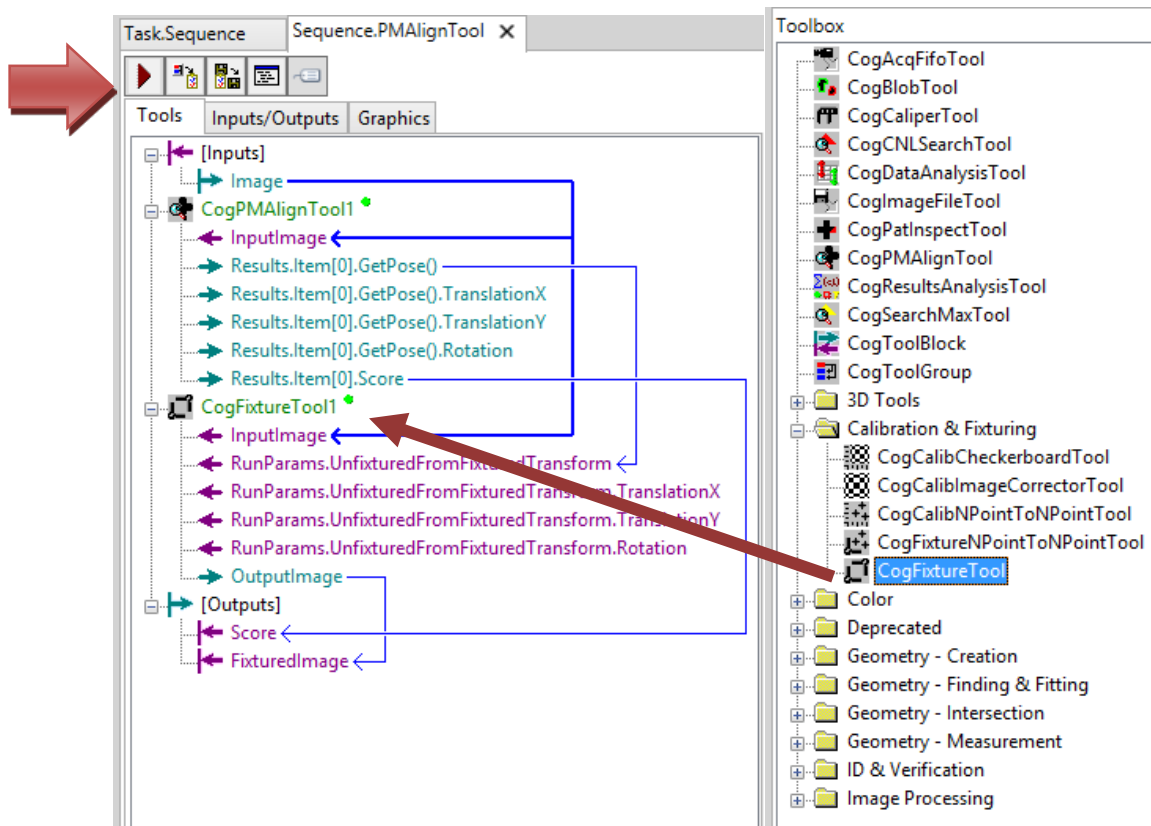
### 1. Add a Fixture Tool

- a. Attach to PatMax results
- b. Create an output pin to the ToolBlock from the OutputImage of the Fixture tool.
- c. Save application

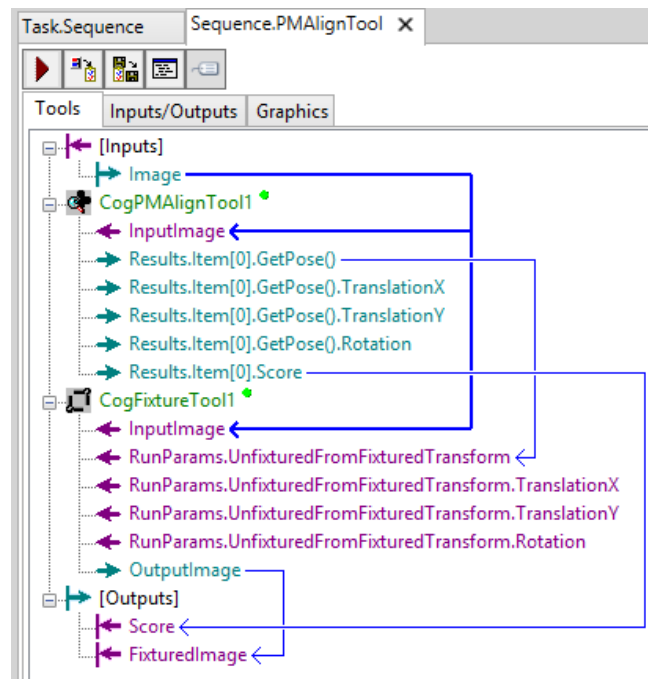
## Steps for the Lab:

### 1. Add a FixtureTool

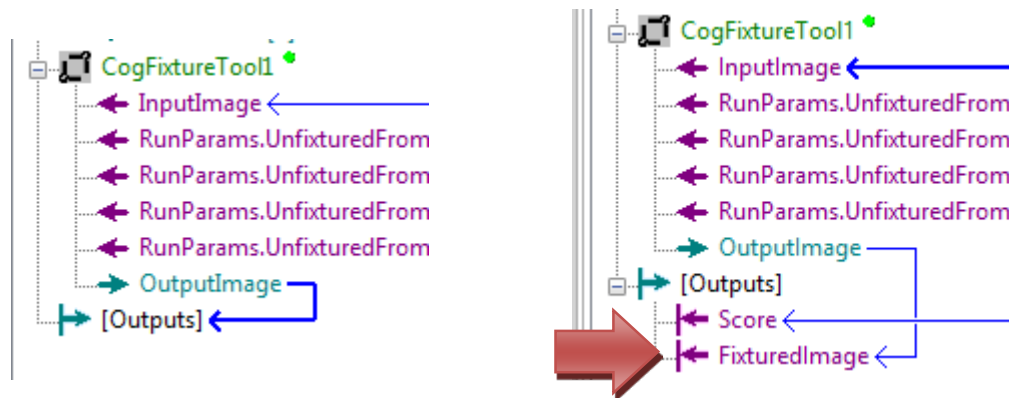
- Go back to the “Tools” tab and add a CogFixtureTool after the CogPMAAlignTool
- Make sure the ToolBlock is run at least once so images are available



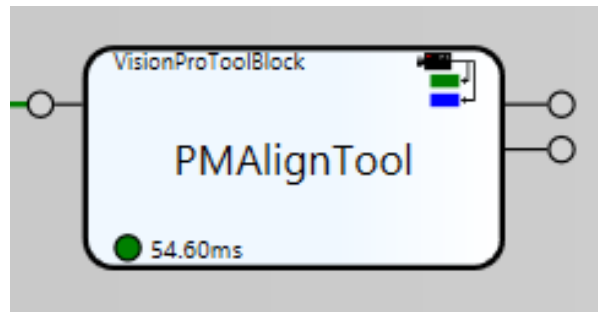
- a. Attach the Image to the InputImage of the new Fixture tool and attach the output Pose from the CogPMAAlignTool tool to the input Transform. Run the ToolBlock again.



- b. Drag the OutputImage from the CogFixtureTool1 down to the [Outputs] area to create an Output pin on the ToolBlock in the Sequence. Rename it to FixturedImage.



- i. Go back to your Sequence and notice the new image output of the FixtureAlign ToolBlock. This image will be used by future 3D Tools to help track changes in part position and orientation.



- c. Save your project by clicking on the Save Timer indicator on the lower right hand corner of Cognex Designer.

