

## Invoke Node

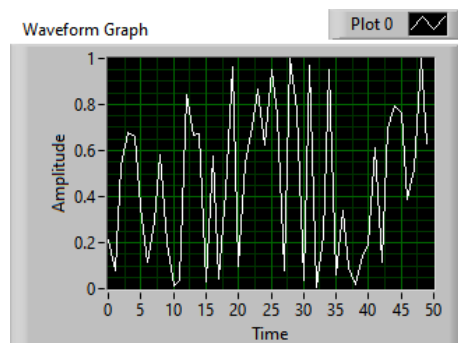
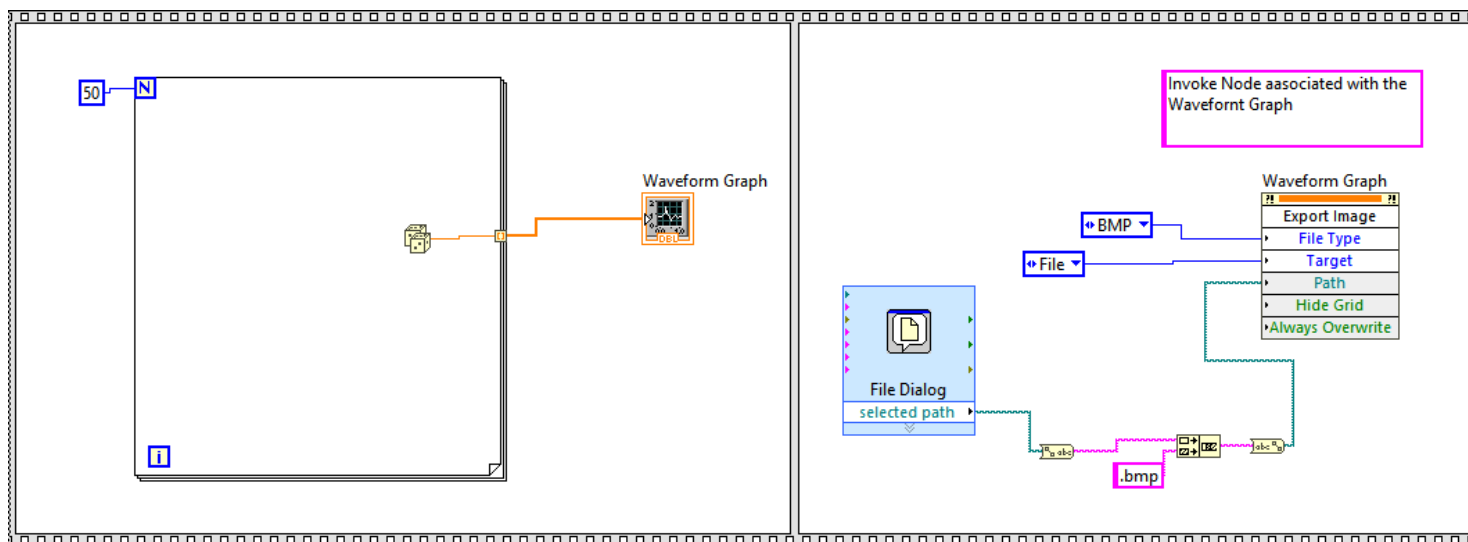
You can use the invoke Node to run a single method on the front panel object. Call an invoke node “execute something” that is associated with the front panel.

Previous, we use an invoke node to select part of an image.

To create an invoke node, pop-up on either the front panel object (image, graph, Chart, mouse) or **its terminal on the Block Diagraph**, and select one of the control’s method from the **Create>>Invoke node>>**short-cut menu, and you can select what item you need.

## Assignment 1: Invoke Node

Complete the following VI to copy the image of the Wavefront Graph and save it in a file. You need to use the Invoke Node to associate with the Wavefront Graph and save it on disk.



## Hint:

1). First, you need to create the first frame of the flat structure, which includes the Waveform Graph image., so that you can use the **Invoke Node** to select it.

2). After the waveform is generated, add the Invoke Node in Block Diagram via:

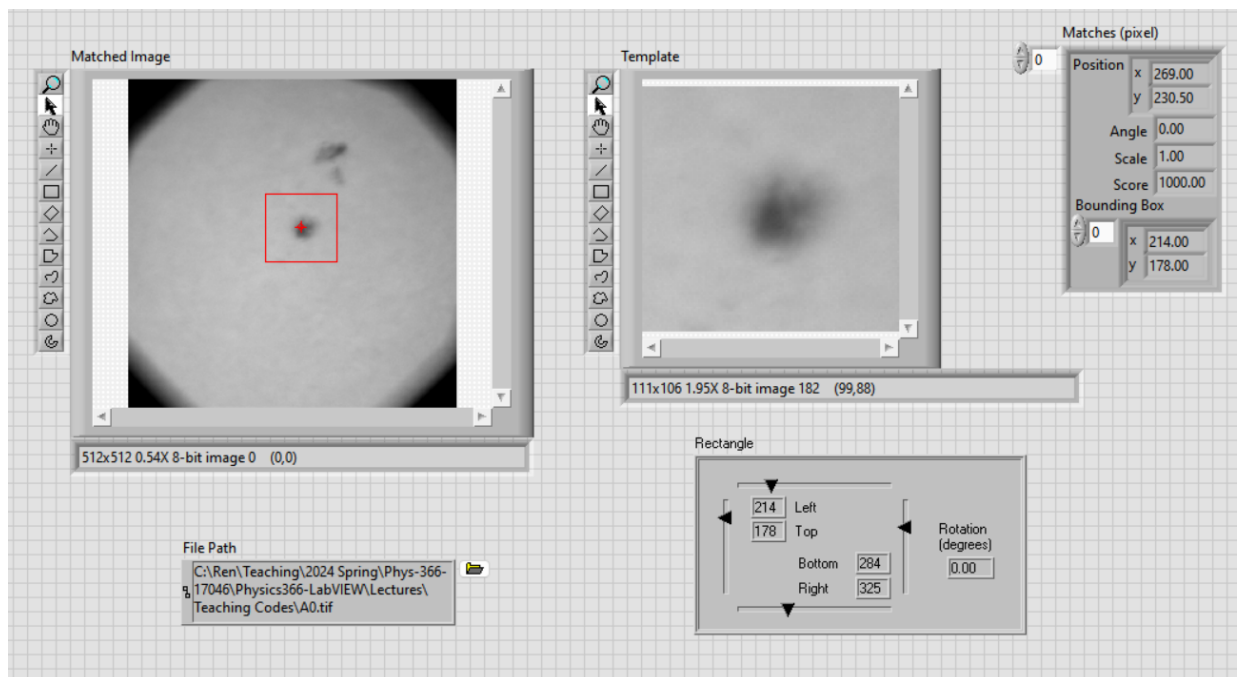
Right-click the Waveform Graph, and select **Create>>Invoke**

**Node>>Explore Image**, which will allow you to copy and save the image.

## Assignment 2: Using Rectangle to Selection of Partial Image

In **Vision and Motion** palette, you can use the two functions **IMAQ Select Rectangle**, and **IMAQ Extract 2** to select an partial image. Write a VI code to open an exist image, and then select partial image and show this selected image. The source image is U16 bit.

Use the source image and the selected image do a pattern match to find the coordinate of the selected image in the source image, and show the coordinate value.



You need to have two image display windows:

- 1) The first one to show the original image
- 2) The second one to show the selected template;
- 3) The first one also used to show the match image with a red-cross (using **a local variable**)

Hint:

These following functions (in **Vision and Motion** menu) are needed. You may need to use the match example code in the LabVIEW example fold for reference.

IMAQ Select Rectangle



IMAQ Learn Pattern 6



IMAQ Extract 2



IMAQ Find Pattern 4

