







How to Convert to and from Dynamic Data Types Tutorial

Functions -> Express -> Signal Manipulation  -> Convert from Dynamic Data , Convert to Dynamic Data 

Start by opening the Functions palette and opening the Express sub-palette. From here open the Signal Manipulation  sub-palette where you will find the Convert from Dynamic Data  and Convert to Dynamic Data functions .

A Dynamic Data type is a data type reserved mostly for Express functions but can be converted to a waveform, array, or numeric values. In order to use the data contained in the Dynamic Data types with other functions, we must convert them from Dynamic Data types with the Convert from Dynamic Data function. If we want to create a Dynamic Data type for use by an Express function, we would have to use the Convert to Dynamic Data function.

Note that the LabView compiler will automatically place these converter functions when you wire Dynamic Data types to non-Express functions and when you wire non-Dynamic Data types to Express functions.

For example, when we supply numeric double arrays to the Express XY Graph, a Convert to Dynamic Data function appears indicating that the numeric double array has been changed to a Dynamic Data type as shown in Figure 1.

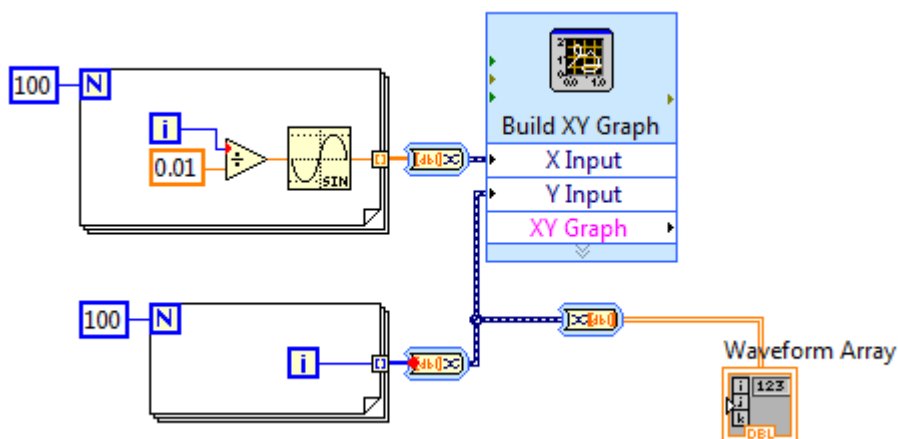


Figure 1

Similarly, if we took a dynamic data type and need to feed it into a function that does not use a Dynamic Data type as its input, we would use a Convert from Dynamic Data type function between the dynamic data type wire to the next function's input as shown by the Convert from Dynamic Data

type block in Figure 1 where we simply reconvert the dynamic data type into a two dimensional array.