Trace names like wave0#1 are automatically generated by Igor based on the name of the wave and the position of the trace in the graph.

It is also possible to assign a user-defined name to a trace that is not derived from the name of the wave being displayed:

```
// Create third instance of wave0. The trace name is thirdInstance.
AppendToGraph wave0/TN=thirdInstance
```

This creates a graph with three traces named wave0, wave0#1 and thirdInstance. The trace name wave0 is equivalent to wave0#0.

As of Igor Pro 9.00, you can change the name of an existing trace using ModifyGraph with the traceName keyword.

User-defined trace names are helpful in graphs that display same-named waves from different data folders. They are also useful for assigning names to be used programmatically which indicate the purpose of the trace rather than the wave supplying the data for it. User-defined trace names can be set only via the Display and AppendToGraph operations.

User-defined trace names are particularly useful for box plots and violin plots, as these plot types often take a list of waves instead of just one wave. Unless you specify a user-defined trace name, the name is taken from the first wave in the list.

See also **User-defined Trace Names** on page IV-89.

Automatically-generated trace names can create surprises. Imagine that three waves from different data folders all having the name "wave0" are added to a graph:

```
Make :df1:wave0
Make :df2:wave0
Make :df3:wave0
Display :df1:wave0,:df2:wave0,:df3:wave0
```

Now the list of traces is wave0, wave0#1, wave0#2. Now remove the first trace:

```
RemoveFromGraph wave0
```

This is equivalent to removing wave0#0. Because the automatically-generated instance number is the based on position in the list of traces, the name of trace wave0#1 changes to wave0 and wave0#2 changes to wave0#1.

For information on programming with trace names, see **Programming With Trace Names** on page IV-87.

Moving Traces

You can move a trace from the left axis to the right axis or vice versa by right-clicking the trace and choosing Move to Opposite Axis. You can do other types of moves using the **ReorderTraces** operation with the /L or /R flags.

Removing Traces

You can remove traces, as well as image plots and contour plots, from a graph by choosing Remove from Graph from the Graph menu. Select the type of item that you want to remove from the pop-up menu above the list.

A contour plot has traces that you can remove, but they will come back when the contour plot is updated. Rather than removing the contour traces, use the pop-up to select Contours, and remove the contour plot itself, which automatically removes all of the contour-related traces. See **Removing Contour Traces from a Graph** on page II-374.