

Create a monitor

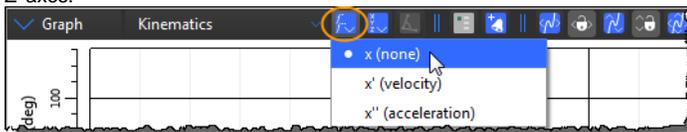
Monitors enable you to specify conditions or events during motion capture sessions, and to interact with them. For example, you can create a monitor for a graphed model output (such as the subject raising an arm to a certain height, or the subject's left knee angle exceeding 180 degrees), and then configure it on the **Monitors** tab of the **Communications** window to trigger one or more actions (such as an event on the time bar or a tone sounding) when the model output matches a condition you specify.

You create monitors in the **Graph** view. You can then configure the monitors in the **Monitors** tab of the **Communications** pane.

For an example of creating a monitor, see [Create a joint range overlay monitor](#) (part of a biomechanics workflow).

To create a monitor:

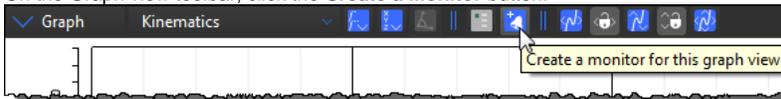
1. Decide on the elements you wish to monitor (trajectories, model outputs, devices, or joints).
2. In a Graph view, click the **Differentiate the graph** button and from the dropdown list, select either:
 - The current variable (x); or
 - Its first derivative, that is, its velocity or angular velocity (x'), or
 - Its second derivative, that is, its acceleration or angular acceleration (x'')For example, a graph of a trajectory will have X, Y, and Z axes, but when differentiated to x' (velocity), the axes will change to X' , Y' , and Z' axes.



3. Click the **Choose the components** button and select the graph components that you want to plot in the **Graph** view (the options depend on your choice in the previous step).

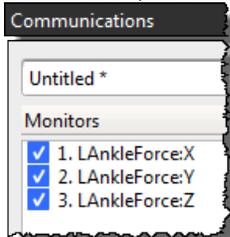


4. On the Graph view toolbar, click the **Create a Monitor** button.



The monitor is added to the **Monitors** list in the **Monitors** communications pane.

The monitor takes the name of the component you selected. For example, if the Graph view you've selected shows X, Y, and Z for the LeftAnkleForce, three monitors are created: LAnkleForce:X, LAnkleForce:Y, and LAnkleForce:Z.



Tip

If you select multiple components for your Graph view, a monitor is created for each component (e.g., x, y, z). You can select and remove one or more monitors that you don't need from the **Monitors** list, or click **Clear** to remove all of them.

You can now configure the monitor, for example to specify a monitor threshold and trigger conditions that will trigger an action.