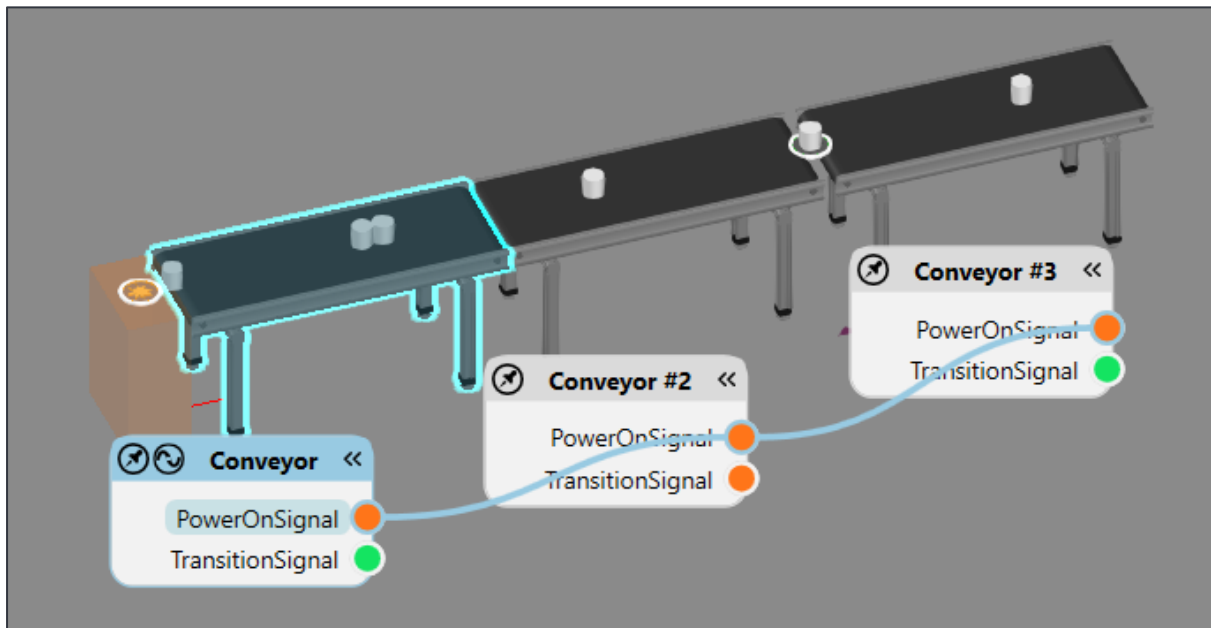


# SendSignal Statement – Part I

Visual Components 4.2 | Version: April 29, 2020



In this tutorial, you will learn how to:

- Use the **SendSignal** Statement to control (start/stop) a line of conveyors.

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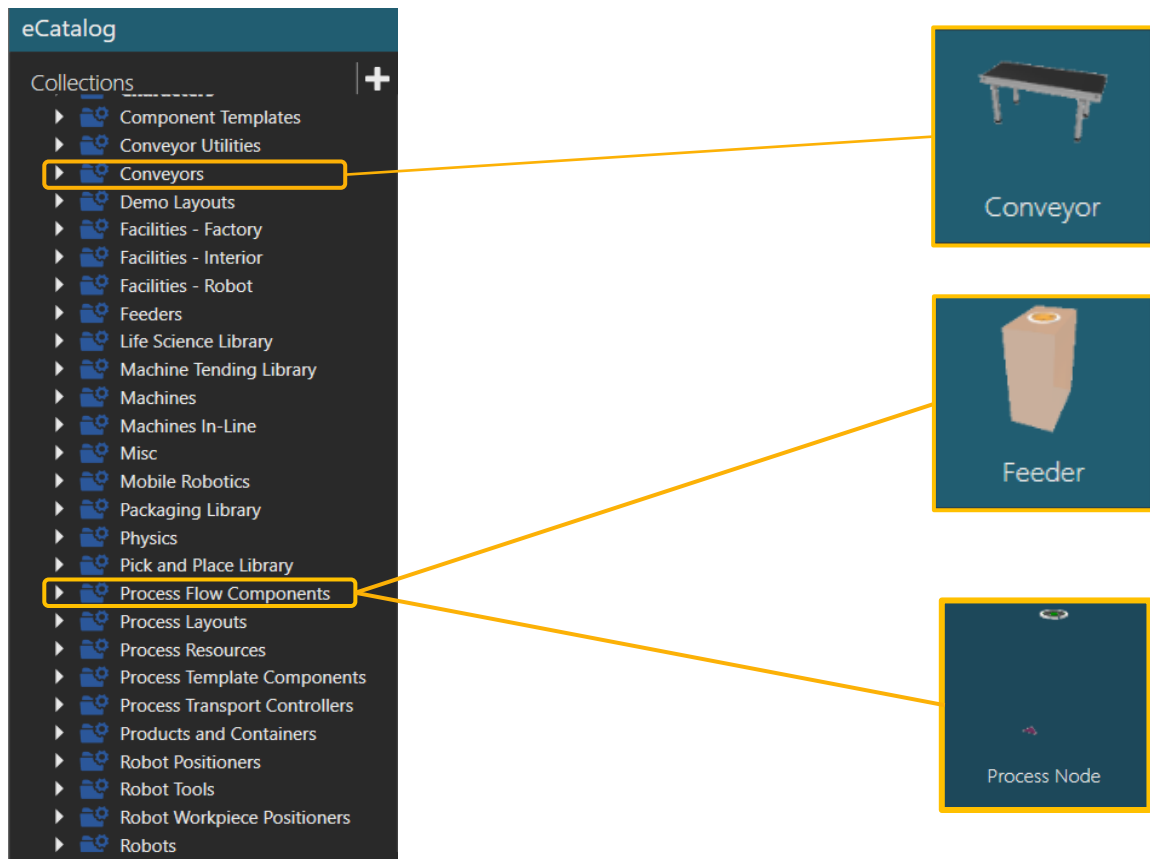
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## 1. ADD THE COMPONENTS

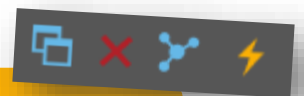
In this section, a simple test layout is created. Some of the contents will be explained in more detail later on.

For the purpose of this tutorial get these components:

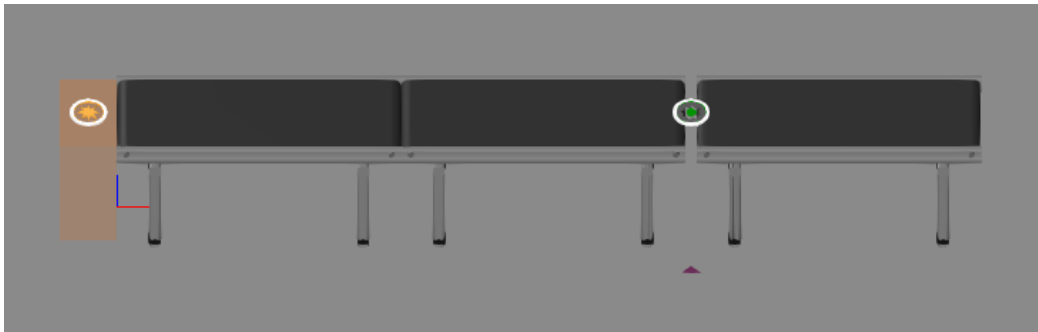


1. Make sure you are in the **Home** context. In eCatalog panel, open up the smart collection **Models by Type**. Then select **Process Flow Components**.
2. Drag and drop the **Feeder** into the 3D world.
3. Connect it with a **Conveyor**.
4. Clone the **Conveyor** twice.

Hint: You can copy the Conveyor using the Clone tool from the Quickmenu, using Ctrl + C, Ctrl + V or by right-clicking the component and using the Copy-Paste options.

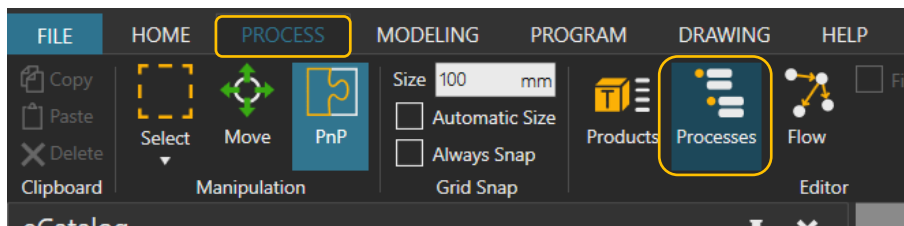


5. Locate the **Process Node** between the second and the third conveyor.

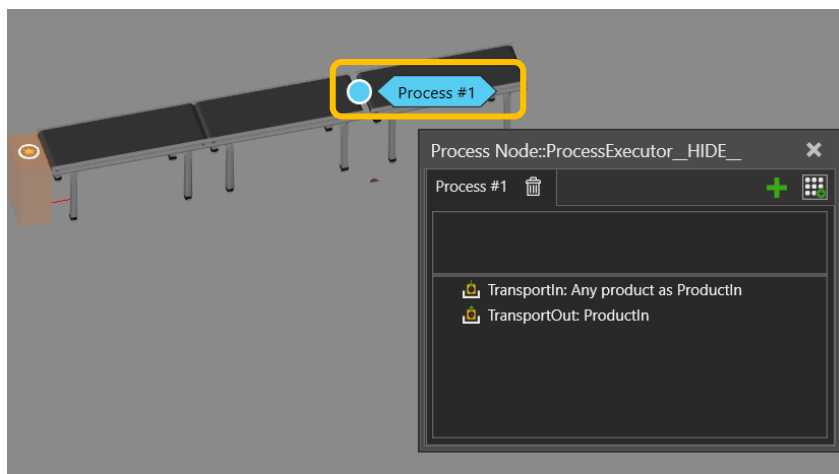


## 2. CREATE THE PROCESS

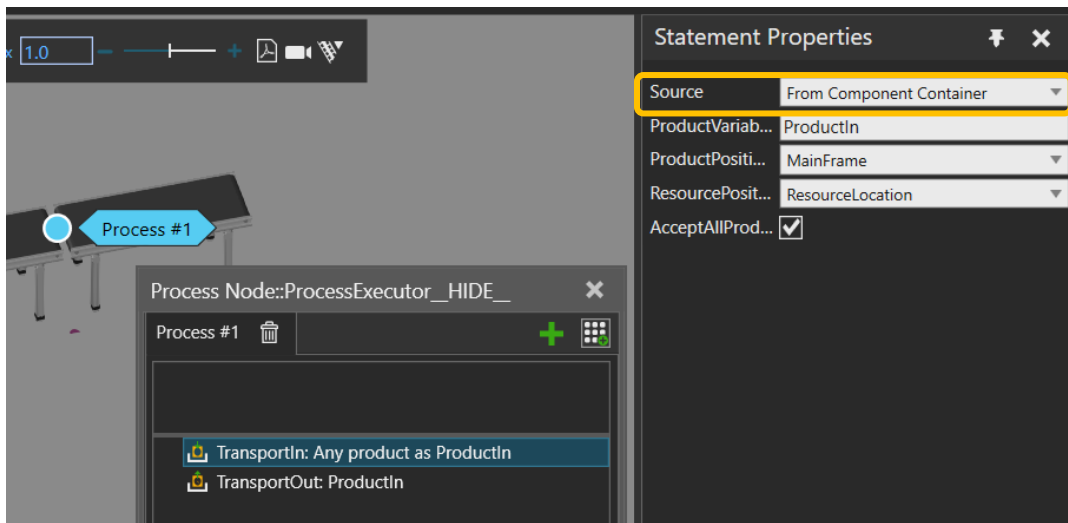
1. Go to the **Process** context and click on **Process**.



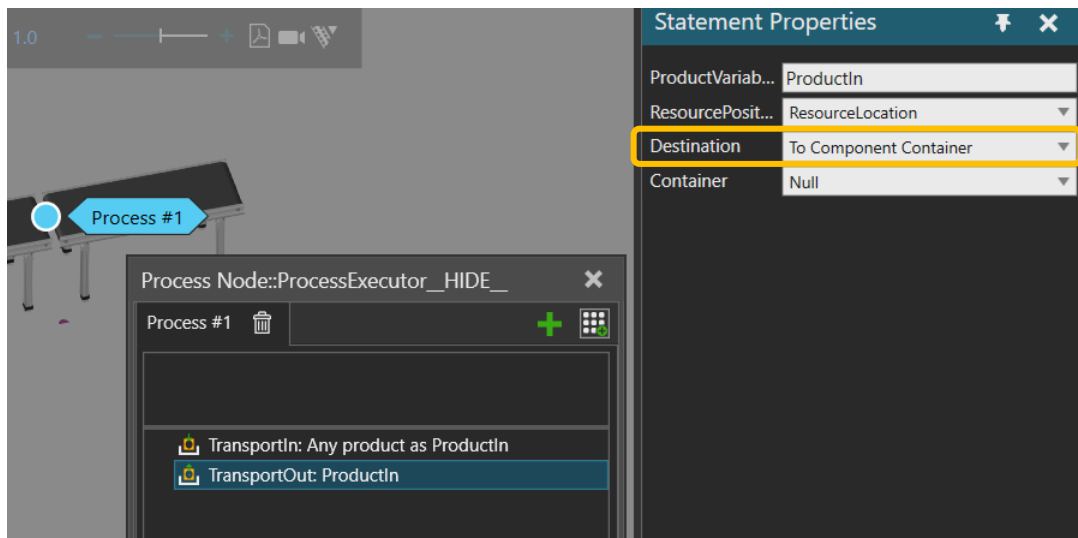
2. Select the **Process Node** component.



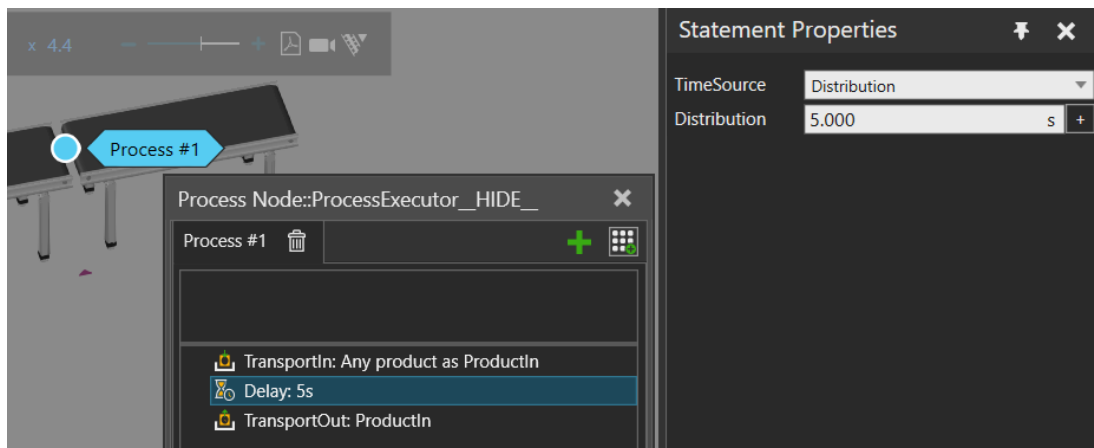
3. Edit the **TransportIn** statement source form **From Previous Process** to **From Component Container**, so the Process node will receive any component that comes from the Conveyor.



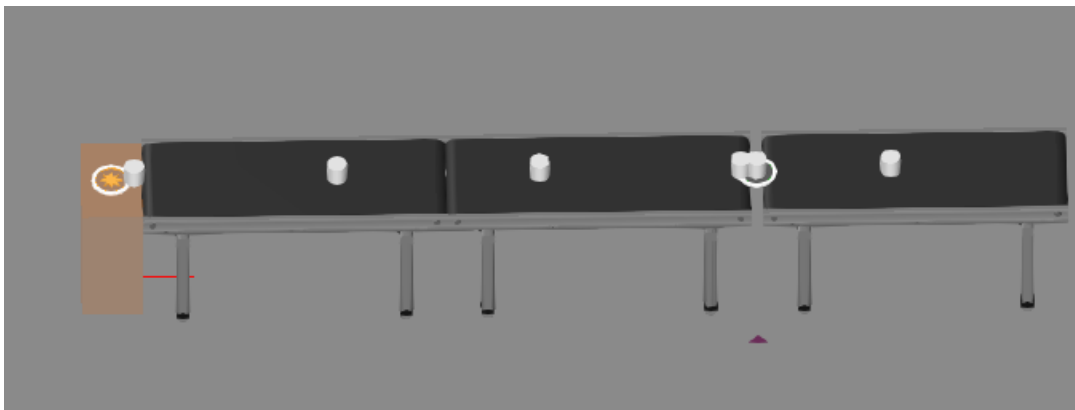
4. In the same way, route the components **To Component Container** in the **TransportOut** statement. This will force product to continue on the conveyor once the process is executed and doesn't require any subsequent process to call the product from the process.



5. Add a **Delay** statement.

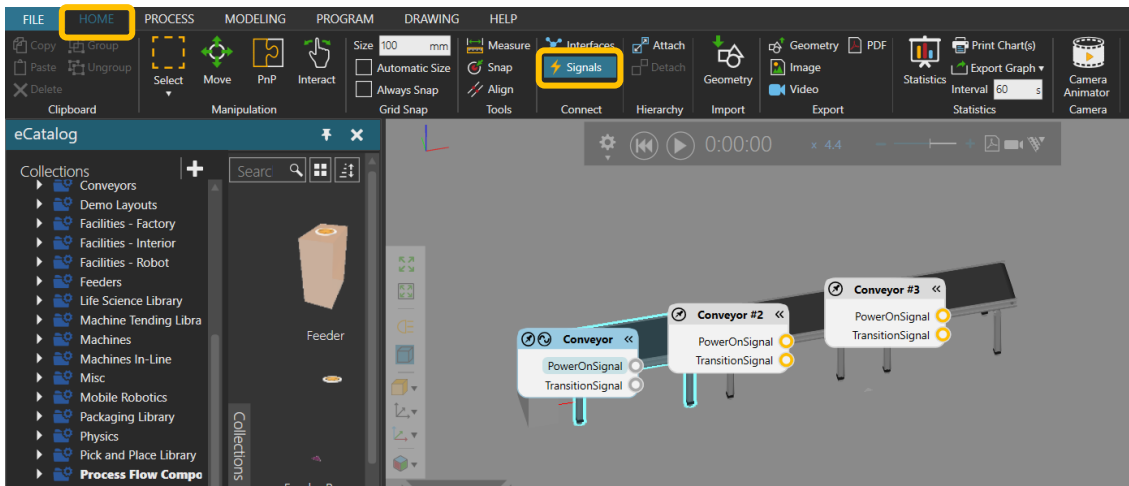


6. Run the simulation and check that it is working.
  - a. At this point the part arrives to the process, stops for 5 seconds and then continues.
  - b. Parts on other conveyors are moving while the part in the process is stopped.
    - ▶ We want to stop the whole line of conveyors simultaneously.

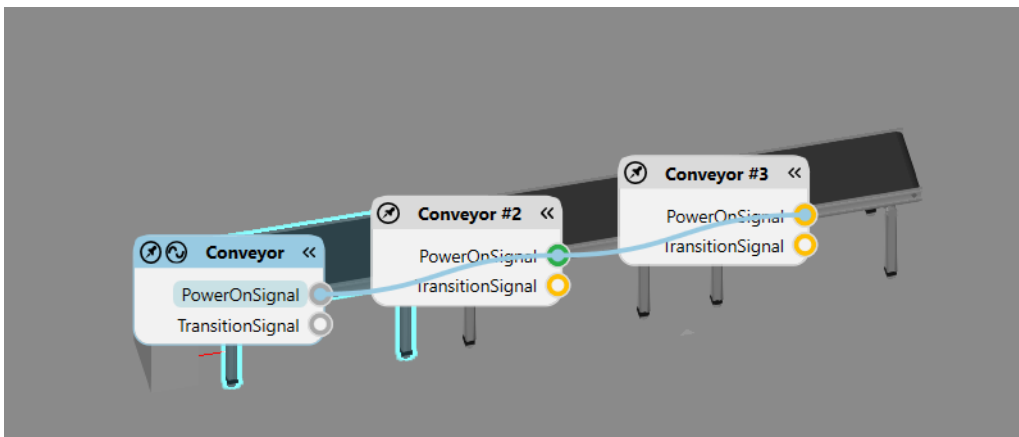


### 3. SET THE SIGNALS

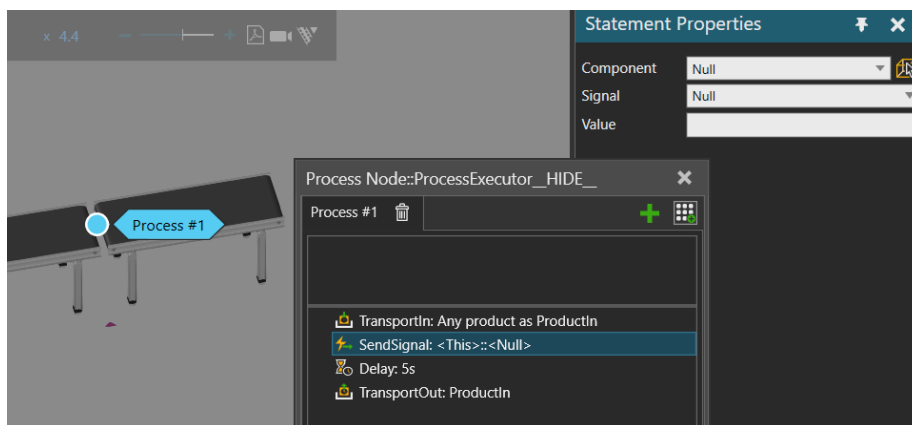
1. Go to the **Home** context.
2. Click on **Signals**.



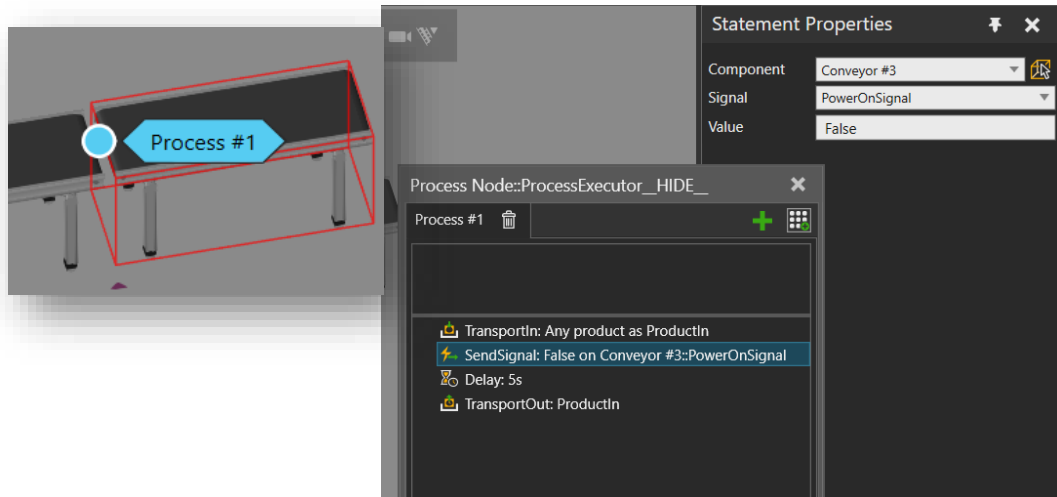
3. Connect the **PowerOnSignal** from the three **Conveyors** together, so they will have the same state.



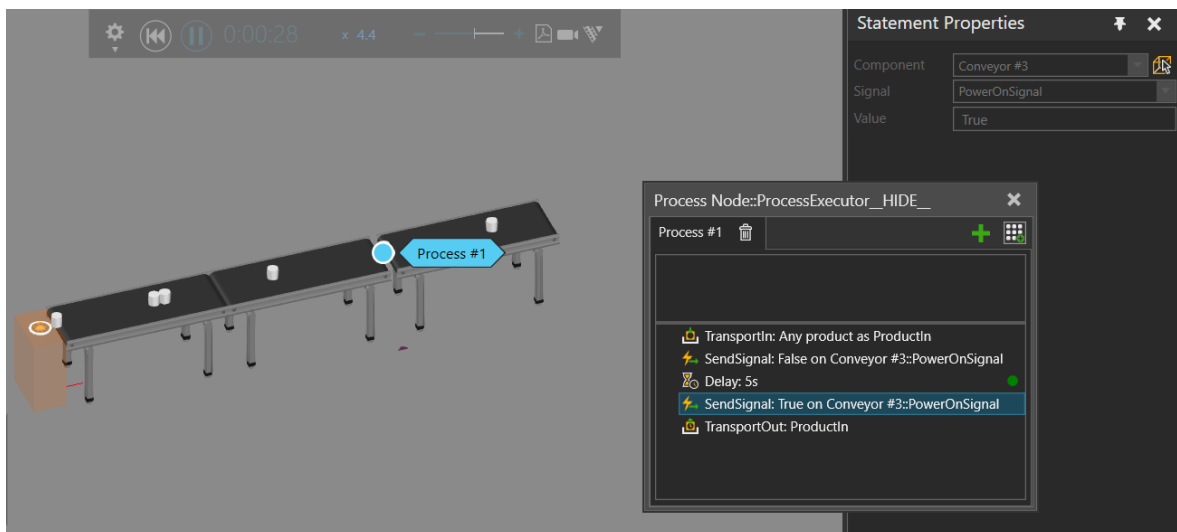
4. Go to the **Process** context again, click on **Process** and open the **ProcessNode** panel.
5. Add a **SendSignal** statement, which allows controlling of signal value



- Choose one of the conveyors, select **PowerOnSignal** as the **Signal** and set the **Value** as False. In this case it doesn't matter which conveyor we choose because the signals in all three conveyors are connected and will have the same state.



- Copy the **SendSignal** statement and paste it after the **Delay**, change the **Value** to True.



- Run the simulation. The parts will stop in all conveyors when there is a part in the **Process Node** and after the Delay they will continue.