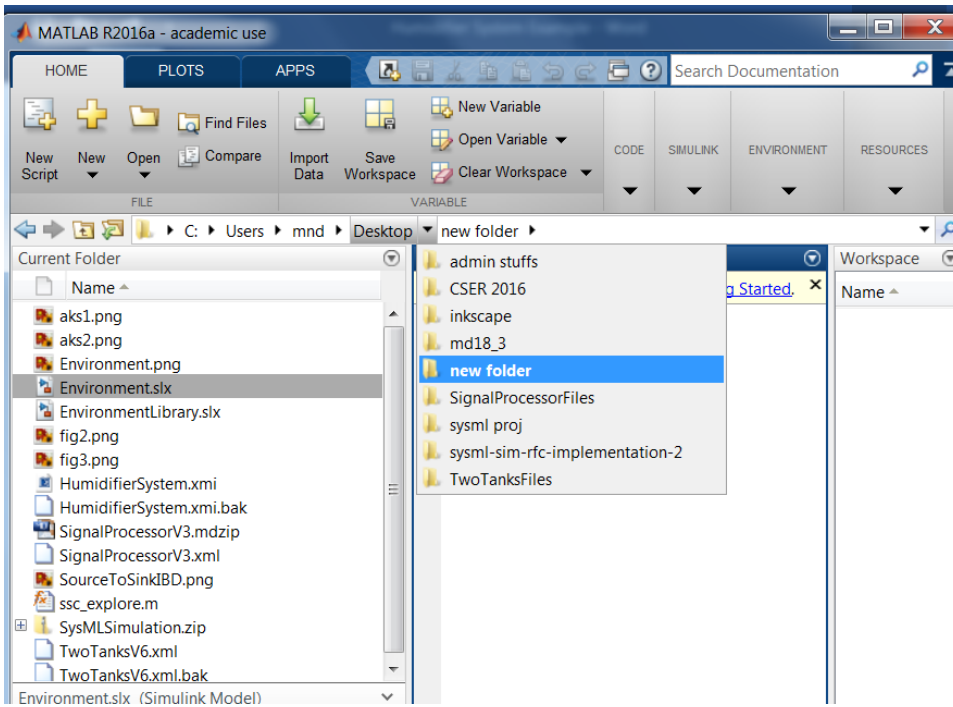


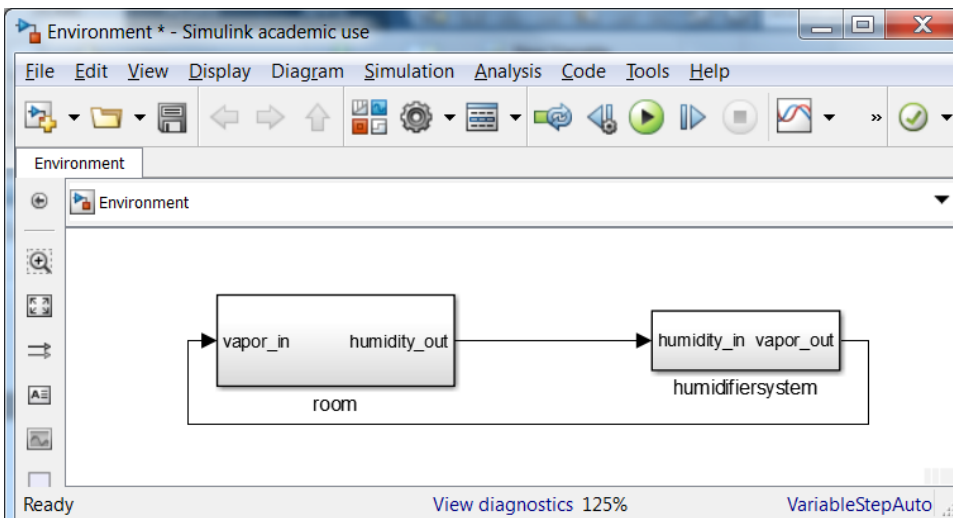
Generate Simulink model

To generate a Simulink model directly from the modeling tool

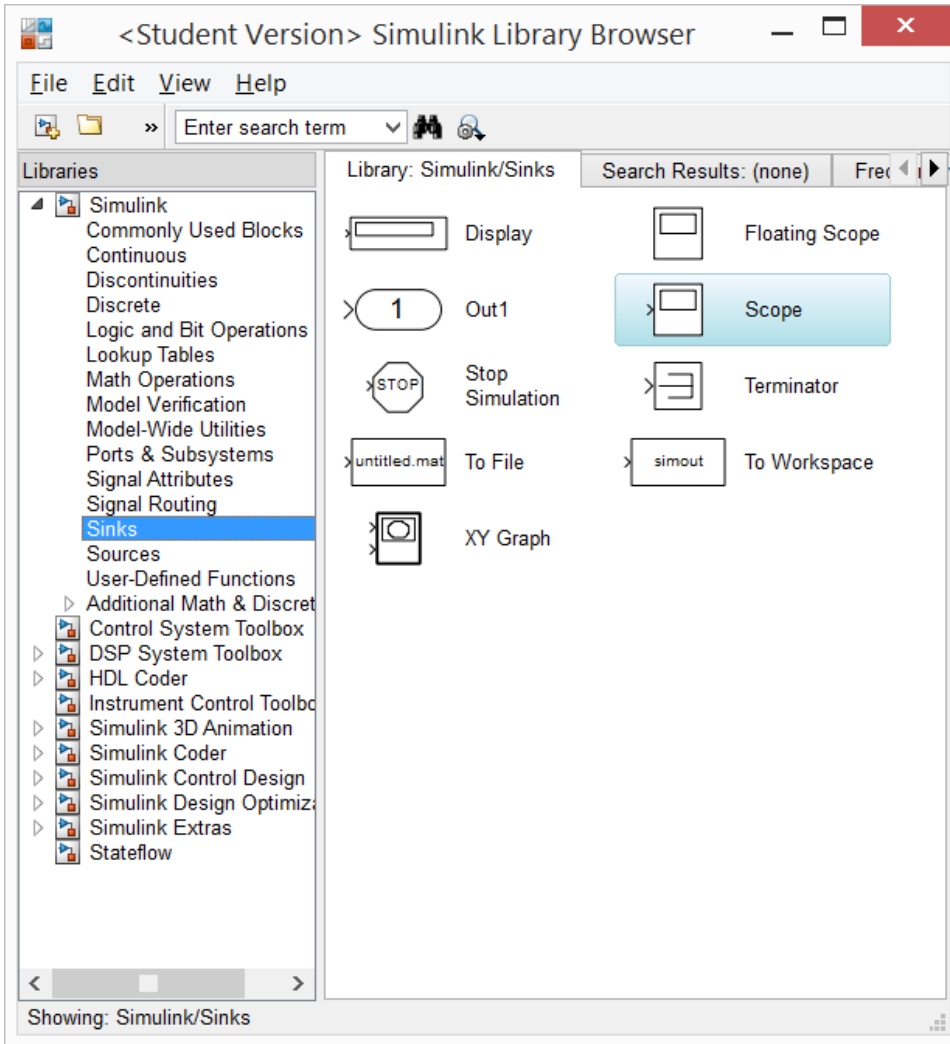
1. Right-click the *Block* **TestCaseHumidifier::HumidifierSystem** and select **Tools > Export** to Simulink. Please see [Generating a simulation file](#) file for more information.
2. Set the options listed below and click **OK**:
 - **Format**: XML (.sdl)
 - **S-Function or Simscape**: S-Function version 2
3. Launch Matlab with Simulink and Simscape extensions.
4. In Matlab's **Current Directory** navigation bar, search for the file directory where the Simulink files (as well as the SysML files) are saved, and set it as the current directory. The **Current Folder** panel should display two generated Simulink ".slx" files.



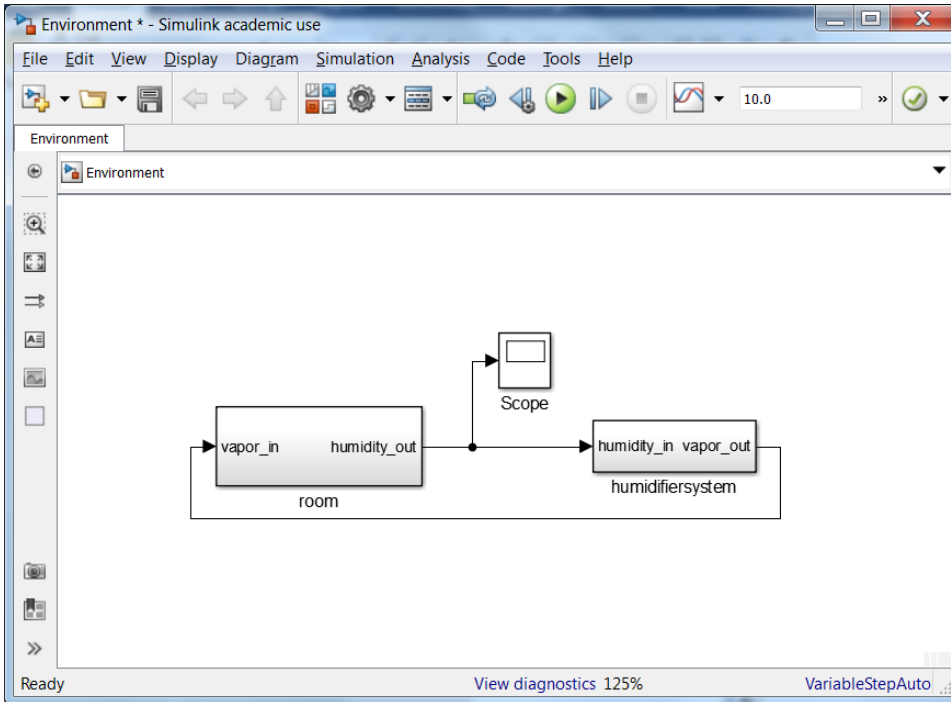
5. In the **Current Folder** panel, double-click on the file named **Environment.slx**. The model will open up in a Simulink window. Rearrange the blocks to reflect the signal flow arrowhead directions.



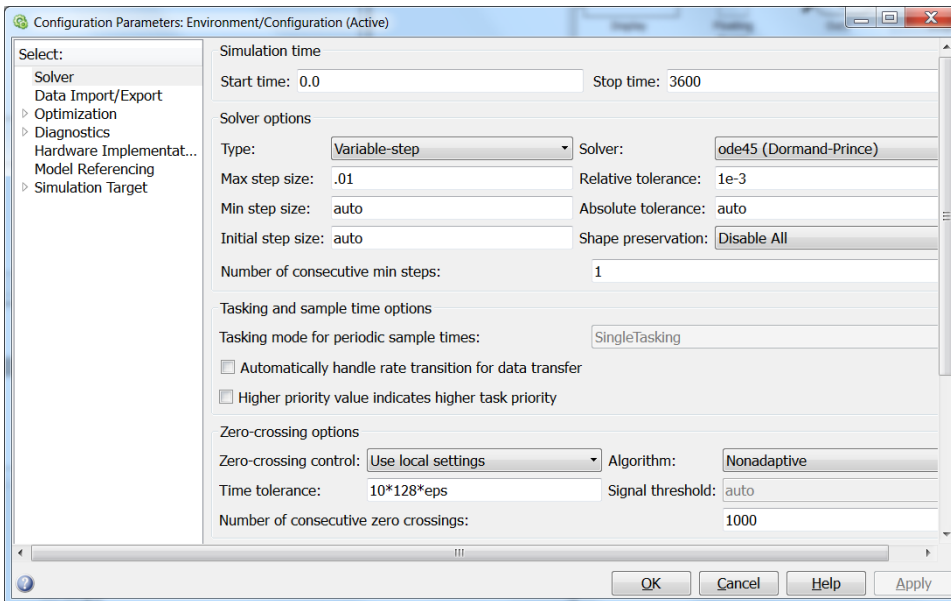
6. Open the **Library Browser** either by using the **4-block** icon or by going to **Tools > Library Browser**. Find and click on **Sinks** among the list in the **Libraries** panel, which will be categorized under **Simulink**.



7. Pull-and-drag the **Scope** block from the **Sinks** library list into the **Environment** Simulink model. Attach a signal line segment from the **Scope** port onto the signal line that connects the *humidity-out* port of the room block to the *humidity-in* port of the **humidifiersystem** block.

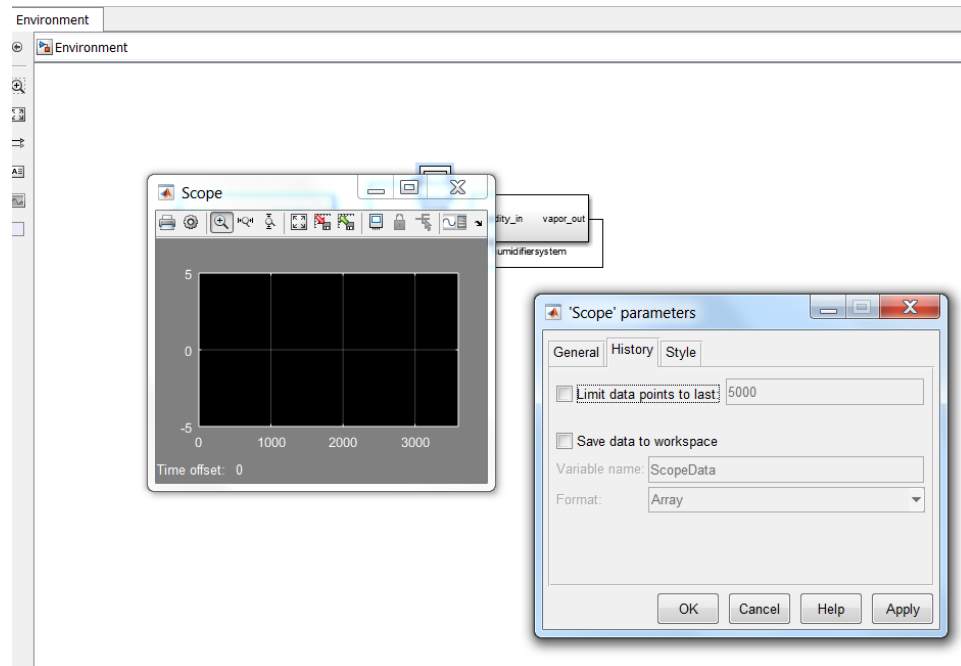


8. Go to **Simulation > Model Configuration Settings**. This allows selecting the types of solver and the runtime of the simulation. Select a **Start Time** of **0**, and a **Stop Time** of **3600**. Under **Solver Options**, select the solver **Type** to **Variable-step** (or any other desirable solver that is suitable) and change the **Max step size** to **0.01**. Press **Apply**, then press **OK**.



9. Double-click the **Scope** block in the model. An empty (black) plot will show up. Press the '**Scope**' parameters button (the gear icon above the empty plot). A '**Scope**' parameters dialogue box will pop up. Go to the **History** tab and uncheck the option box **Limit data points to last**. Press

Apply, and then **OK**.



10. Go to **Simulation > Run**. Double-click on the **Scope** block to see the simulation results.

