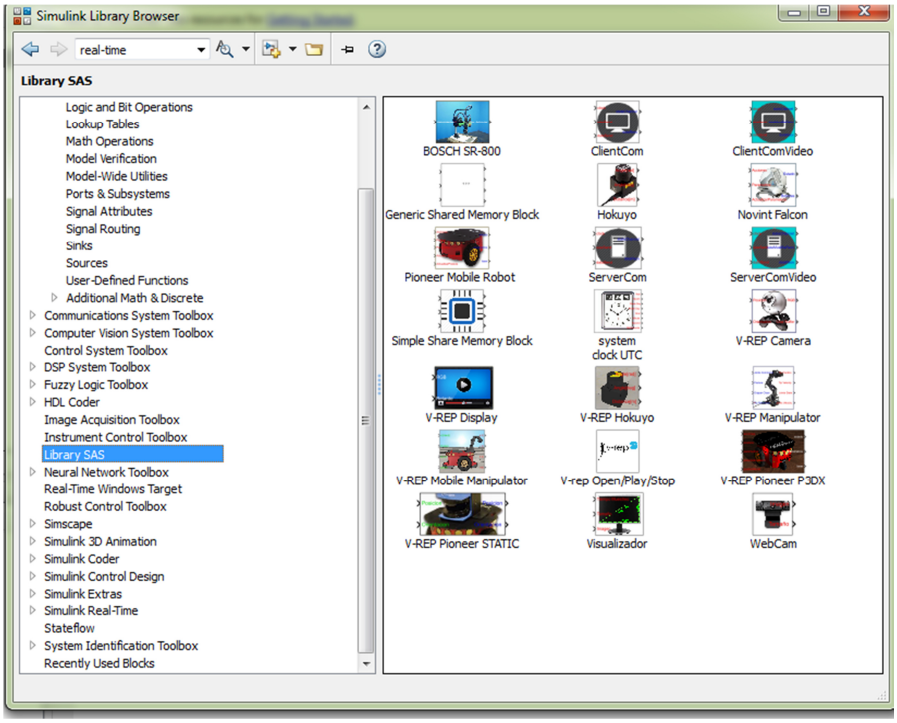
TUTORIAL FOR
"Shared Academic Software"

1. INSTALL

Steps to install the library SAS:

1. For web user Uploading the file SAStool .rar from the link https://drive.google.com/drive/folders/0B2jklwyyOJqPNVA2SWFSaGFSNnc?usp=sharing

   and unzip the content in a DIRECTORY on your computer. For collaborators an invitation will be received in your email in order to access to the library using google drive
2. Open Matlab and run the script 'INSTALL_SimulinkLibrary.m' found in the location "DIRECTORY\ SAS TOOLS"
3. Verify the correct installation of the library searching it in simulink, such as it is observed in the Figure. Press F5 to update the simulink libraries and view the "library SAS".



2. START-UP

The steps for using the library SAS are the following:

1. Open Matlab/Simulink
2. Open a new model on simulink
3. Build your system including one or many library blocks. Each HELP of the block includes the following short sections: “HELP DEVICE”, “HELP DRIVERS”, “HELP BLOCK”, and “HELP APP”
4. Configure the block parameters and connect the input and output ports, see “HELP BLOCK” for information about input and output ports of the block. Includes in your model the simulink block “Real-time Sync” or “SimulationPace”. A fixed-step size set in the “Configuration Parameters” of your simulink model is recommended.
5. Install the drivers and/or libraries if they are indicated in “HELP DRIVERS” of each block
6. Power on the devices used. See “HELP DEVICE” for information about the device
7. Run the app associated to the block, configure and play it. The information about the app location and their menu options are included in “HELP APP”
8. Run the simulation (Play)
9. Stop the simulation (Stop)
10. The data can be online viewed using the scope block of simulink or off line from the plot commands in matlab applied to the data saved on the workspace.
11. Repeat the steps 8, 9 and 10 to carry out N experiments
12. Stop and Close all applications of the library.
13. Power off all used devices