Building Simulink models that use TrueTime Kernel

Initial Set up

1. The HCDDES installer has placed the TrueTime library in ${VCP_PATH}/lib/ and defined the required ${TTKERNEL} variable to point to this toolbox for you.

2. Open MATLAB, and add the following relevant TT directories to your path.
   - `addpath([getenv('TTKERNEL')])`
   - `addpath([getenv('TTKERNEL') '\matlab\help'])`
   - `addpath([getenv('TTKERNEL') '\matlab'])`
   - `mex -setup`
   - `truetime`

Experiment

1. Interpret the ESMoL model with the TrueTime_CodeGen interpreter to generate the Schedule.m and Additional_Rules.m referred to in the readme.txt with the TrueTime-Generator.

2. Create Simulink file corresponding to each NodeRef in the ESMoL model. The Simulink file should be named as – NodeRef name suffixed with "_fn.mdl"

3. Create a Simulink file – Additional_Imports.mdl - to hold any additional Simulink blocks that may be needed. The names of the additional input and output blocks can be obtained from the "Additional_Rules.m" file. The script – Additional_Rules.m – expects to find the blocks with suffixes "_input" or "_output" in the Additional_Imports.mdl file.

4. In order to build the Simulink model, follow the instructions at the end of the TrueTime-Generator-readme file. Refer to the section "Running the entire system".

Sample

- A sample ESMoL model – CompassDemo.xme – and other manually created Simulink files can be found in Test\TTSample\CompassDemo. The interpreter output can be tested with these files.