Tue Aug 2, 2011
Tadele

Code generation in 20-sim is done by using templates and tokens.

Template: A template is a folder placed in directory '*20sim/Ccode*' and contains list of files that will
be generated. The files also contain Tokens, which are used to finish off the code. For
example these files may contain a token entry %SUBMODEL_NAME% which is
modified by the code generation.

Tokens : are placeholders for model names. They can be of any C-type (a string or an
integer etc.). When generating code, 20-Sim (sub-)model parameters and variables (such
as states, rates, component names or dll-function replace these tokens. Token names are
found in file '*Keywords.txt*' in folder '*20-sim/Ccode/*'

A Typical C++ code generator template for 20-sim submodel consists of common directory with
most model implementations and a token %SUBMODEL_NAME% header and cpp files. The Files
seem to follow a typical OROCOS component structure with initialization, computation and
cleanup features. There is also a test_%SUBMODEL_NAME%.cpp file with ` main ()` for
executing and testing the code.

It loos like we can modify some of the template files and have an orocos component project
template within 20-sim...