

ABSTRACT

Recent trends in computer aided engineering (CAE) and optimization (CAO), seem to be introducing more and more simulation techniques based upon the combination of two or more simulation tools in order to accomplish a common task. One factor that led to this co-simulation trend is the ongoing development of computational resources which enable the working-together of different simulation tools which are of themselves usually complex enough and finishing the designated tasks within acceptable time limits. This paper deals on the one hand with an independent coupling integration approach and on the other hand with some basic assumptions regarding the synchronization in the time domain which form the very basics of each co-simulation process.