

# Genetic Circuit Synthesis in iBioSim

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This document describes the steps to perform genetic circuit synthesis in iBioSim using the supplementary materials provided for Directed Acyclic Graph-Based Technology Mapping of Genetic Circuit Models.

1. Select Open Project from the File menu and choose one project directory beginning with "lib."
2. Select Import → SBML Model from the File menu and choose SBML model from the project directory named "specifications."
3. Highlight the imported specification model, then select Synthesis Tool from the Tools menu to map it to the models in the current library project and synthesize a composite SBML model. A Schematic view should open automatically for the newly synthesized SBML model.
4. Click on the Apply Layout button on the Schematic toolbar, then select Vertical Hierarchical.