High-Level Modeling

The General Algebraic Modeling System (GAMS) is a high-level modeling system for mathematical programming problems. GAMS is tailored for complex, large-scale modeling applications, and allows you to build large maintainable models that can be adapted quickly to new situations. Models are fully portable from one computer platform to another.

Multiple Model Types

GAMS allows the formulation of models in many different problem classes, including

- linear (LP) and mixed integer linear (MIP)
- nonlinear (NLP) and mixed integer nonlinear (MINLP)
- mixed complementary (MCP)
- programs with equilibrium constraints (MPEC)
- stochastic linear problems
- constrained nonlinear systems (CNS)
- conic programming problems

Real World Modeling

The GAMS model library consists of over 250 models from many different application areas to help the user in solving real world applications. Our sample models include applications in

- Economics and Econometrics
- Engineering and Medicine
- Finance and Management Science
- Operations Research

Many production-scale application models can be developed by simply extending library models.