



# GAMS

MODEL – SOLVE – DEPLOY

## GAMS – GENERAL ALGEBRAIC MODELING SYSTEM

### AT A GLANCE

The General Algebraic Modeling System (GAMS) is a mature system that gives you access to cutting-edge modeling and optimization technology.



Mathematical optimization is the task of finding the best solution to a given problem from a set of possible alternatives. Example applications include minimizing shipment costs or production idle time, maximizing returns, or finding an optimal solution to a scheduling problem with many constraints. Optimization is widely used in a number of different areas and industries such as energy, agriculture, engineering, policy-making, economics, production, pharmaceutical, or chemical engineering.

GAMS provides everything needed to support the development and deployment of optimization applications. With a broad academic and commercial network in more than 120 countries and more than 30 years of experience in industry and academia, GAMS engineers support clients during the entire process; our support services go beyond technical product support, and include analyzing and enhancing your models.

### KEY FEATURES

- STATE-OF-THE-ART MODELING TECHNOLOGY
- TAILORED FOR COMPLEX, LARGE-SCALE MODELING APPLICATIONS
- RAPID DEVELOPMENT ENVIRONMENT
- INTEGRATIONS FOR ALL MAJOR COMMERCIAL AND OPEN SOURCE SOLVERS
- APIS TO CONNECT TO AND FROM MAJOR PROGRAMMING LANGUAGES
- INCLUDES A HUGE MODEL LIBRARY TO HELP USERS GET UP TO SPEED
- EXTRACT, TRANSFORM AND LOAD DATA VIA A PLUGGABLE DATA IMPORT/EXPORT SYSTEM

OUR PRODUCTS

 <b>GAMS</b> Modeling Platform <ul style="list-style-type: none"><li>Platform independent algebraic modeling language</li><li>Connected to a wide range of commercial and academic solvers</li><li>APIs for C++, Java, Python, Matlab and more</li></ul>	 <b>MIRO</b> Deployment Environment <ul style="list-style-type: none"><li>Transformation of models into applications</li><li>Rich set graphical output options</li><li>Open source, extendable with custom code</li></ul>	 <b>ENGINE</b> Centralized Hosting <ul style="list-style-type: none"><li>Solve GAMS models in the cloud or on-premise</li><li>REST API for user &amp; job management</li><li>Built in GAMS job scheduling</li></ul>
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**PROBLEMS AND THEIR SOLUTIONS DIFFER,  
BUT WITH GAMS YOU FIND THE BEST-FITTING TOOLS  
FOR SOLVING THE PROBLEMS AT HAND.**







GAMS IN PRACTICE

USE CASES

GAMS is specifically designed for modeling linear, nonlinear and mixed integer optimization problems and is used in a wide range of business areas to find optimal solutions.



VISIT OUR WEBSITE FOR  
A CLOSER LOOK AT GAMS

 <b>Transportation Planning</b> Find the optimal way to distribute goods between different sites	 <b>Route Planning</b> Find the shortest route through multiple cities	 <b>Production Planning</b> Decide how much to produce based on demand and prices for production and stocking
 <b>Scheduling</b> Minimize total processing time for sequential assembly steps	 <b>Cutting Stock</b> Minimize waste when cutting stock into smaller pieces	 <b>Blending</b> Calculate the optimal mixture of different ingredients to produce a product of desired quality

CONTACT US FOR CUSTOM-MADE SOLUTIONS AND ASSISTANCE ON YOUR INDIVIDUAL GAMS MODELS.

