



GAMS STUDIO

INTEGRATED DEVELOPMENT ENVIRONMENT

GAMS Studio is a completely new integrated development environment for GAMS that is available for Windows, Mac OS X, and Linux. GAMS Studio development follows an agile methodology, so it was released at a very early stage last year to encourage users to weigh in and help prioritize future development directions.

Although still under development, GAMS Studio already delivers a combination of new elements and features found in the classic GAMS IDE:

- A modern code editor to write GAMS models (including basic syntax coloring, block edit mode, bookmarks)
- Customized execution of GAMS models supported by an interactive and intuitive parameter editor
- The output panel shows the GAMS log, i.e. the progress of the GAMS run
- The listing viewer (including a tree view to navigate through the file) allows inspection of the output file
- The GDX viewer allows you to explore the content of your GDX files, starting with the symbol table and continuing to a view of the actual data that includes tools for sorting, filtering, and reshaping
- The reference file viewer helps to navigate the source code of GAMS models by pointing to the declaration, definition, assignment, and use of all user symbols
- The project explorer manages different projects in one session
- The integrated help system makes it easier to find additional information
- The solver option editor offers an interactive way to create solver option files

Join our Community



www.gams.com/community



www.youtube.com/GAMSlessons



www.facebook.com/GAMSoofficial

WHAT'S NEW IN GAMS STUDIO (VERSION 0.13.0)



GAMS Studio is under active development by a dedicated team. New features are added to Studio with every release.

In GAMS Studio (Version 0.12.1) we added a first, basic version of a **Table View to the GDX Viewer**. For multi-dimensional symbols, the Table View offers an alternative to the default list view. In addition, it is now possible to hide specific value columns for variables and equations, allowing a sharper focus on the information of current interest. In the latest versions this feature was improved further, for example, to allow drag & drop functionality to customize your view on the data.

Entry	Name	Type	Dim	Records	Text
6	cq	Set	1	18	crop and livestock pr...
162	cropanea	Parameter	2	114	cropped area 1988 (0...
19	dc	Set	1	6	characteristics of can...
130	demand	Parameter	2	97	market demand by z...
254	dennat	Equation	2	131	provincial demand b...
255	dennatn	Equation	2	0	zonal demand balan...
75	dep1	Parameter	3	162	depth to water table ...
76	dep2	Parameter	3	120	depth to water table ...
77	depth	Parameter	2	516	depth to groundwat...
278	divcnlea	Equation	2	86	canal diversion by se...
185	divmvp	Parameter	1	12	monthly diversion to ...
73	divpost	Parameter	2	639	average(1976-77 to 1...
277	divsea	Equation	1	2	total canal diversions...
82	drc	Parameter	0	1	run-off portion of rai...
116	ecnsdwtpr	Parameter	3	35	prices of seed/irs per ...
78	efr	Parameter	2	508	effective rainfall in feet
146	efrz	Parameter	2	107	effective rain by acz ...
133	elast	Parameter	1	13	elasticity of demand ...
195	emisc	Parameter	1	7	economic miscelleni...
198	emiscct	Parameter	1	15	economic water char...

GDx Table Viewer

The **solver option editor** was added with Studio 0.12.3. It is used to view and edit solver-specific option files and provides a browser of solver option definitions which can be displayed in groups or be filtered by names. Options can be directly added into or deleted from the editor interactively. Also, the help system to learn more about the various options is nicely integrated.

Key	Value
Number of rounds that cut generators are applied in the tree	8
Switches all cut generators on or off	
ifmove	
cuts	ifmove

Option	Synonym	DefValue	Range	Type	Description
<input type="checkbox"/> cliqueCuts		0	(0, 1)	Boolean	Whether to use Clique Cuts
<input type="checkbox"/> conflictCuts		0	(0, 1)	Boolean	Conflict Cuts
<input type="checkbox"/> cut_passes_root	passCuts	20	[-1, 2147483648, 2...]	Integer	Number of rounds that cut generators ar...
<input type="checkbox"/> cut_passes_slow	slowcutpasses	10	[-1, 2147483647]	Integer	Maximum number of rounds for slower c...
<input type="checkbox"/> cut_passes_tree	passTreeCuts	10	[-1, 2147483648, 2...]	Integer	Number of rounds that cut generators ar...
<input type="checkbox"/> cutDepth		-1	[-1, 2147483647]	Integer	Depth in tree at which to do cuts
<input type="checkbox"/> cutLength		-1	[-1, 2147483647]	Integer	Length of a cut
<input type="checkbox"/> cutoff		1e+100	[-1e+299, 1e+2...]	Double	Bound on the objective value for all solut...
<input type="checkbox"/> cutoffConstraint	constraintfromCutoff	off	(0, 1), conflict, ...	EnumStr	Whether to use cutoff as constraint
<input checked="" type="checkbox"/> cuts	cutsOnOff	on	(forceon, ifmov...	EnumStr	Switches all cut generators on or off
<input type="checkbox"/> forceon					
<input type="checkbox"/> ifmove					
<input type="checkbox"/> on					
<input type="checkbox"/> root					
<input type="checkbox"/> feasibility_cutoff	pumpCutoff	0	[-1e+299, 1e+2...]	Double	Fake cutoff for use in feasibility pump
<input type="checkbox"/> flowCoverCuts		ifmove	(forceon, ifmov...	EnumStr	Whether to use Flow Cover cuts

Solver Option Editor

You can find a full list of new features in GAMS Studio (Version 0.13.0) here: gams.com/studio-features

FIND OUT MORE ABOUT GAMS STUDIO

- An overview of what is included in GAMS Studio can be found in our documentation: gams.com/studio
- Take a look at our YouTube Video to get a first impression on how to work with GAMS Studio: youtu.be/p1D86dpyFFy
- Users can contribute directly or build on top of GAMS Studio, since it is open source under GNU GPL license: github.com/GAMS-dev/studio
- Give it a try! GAMS Studio is integrated with the latest version of GAMS and available for download at: gams.com/download
- We encourage your feedback about GAMS Studio. To suggest additional features or provide comments, please contact: studio@gams.com