

TOMLAB /GUROBI is the latest and fastest in high-performance multi-core/cpu computing for large-scale linear, integer and quadratic optimization in MATLAB. The more CPUs and cores available on the computer, the faster the software will run for MIP models!

All license types include no restrictions on the number of cores or shared-memory CPUs, i.e. it is always parallel for binary/integer models.



Features and Capabilities

- ✓ Simplex LP solvers (primal and dual) with advanced pre-solve capabilities.
- ✓ Infeasibility and sensitivity analysis for linear programming (LP) problems.
- ✓ Mixed-binary/integer programming with a variety of cut options and heuristics. Special order sets (type 1 and 2), semi-continuous and semi-integer variables are supported. A known solution can also be provided.
- ✓ Deterministic solution process, i.e. it will always generate the same results when using the same number of CPUs.
- ✓ Full control in MATLAB of all TOMLAB /GUROBI parameters and status variables.
- ✓ Fully sparsified code, capable of handling large, sparse problems.
- ✓ A variety of example files are included demonstrating the integration with the TOMLAB modeling environment.

Coming Capabilities

- Simplex QP solver.
- Barrier solver for LP, QP problems with quadratic constraints.
- MIQP and MIQQ solver.

Toolbox Options

For commercial use, there are many different solver and license options. The GUROBI solver is always included and has no CPU or core restrictions.

- ✓ **TOMLAB /GUROBI - CLUSTER:** Cluster licenses are available for all options below. This license type allows for execution on large-scale cluster environments.
- ✓ **TOMLAB /GUROBI:** Licence options are: LP, MILP (also supports QP) and FULL.

Requirements

- MATLAB R2007b or later on Windows 32/64-bit, Linux/OSX 64-bit.