



(<https://neos-server.org/neos>)

NEOS Interfaces to CPLEX

Sample Submissions ([solvers/lp:CPLEX/samples.html](https://neos-server.org/neos/solvers/lp:CPLEX/samples.html))

WWW Form ([solvers/lp:CPLEX/AMPL.html#webform](https://neos-server.org/neos/solvers/lp:CPLEX/AMPL.html#webform)) - **Email** ([solvers/lp:CPLEX/AMPL-help.html](https://neos-server.org/neos/solvers/lp:CPLEX/AMPL-help.html)) - **XML-RPC** ([solvers/lp:CPLEX/AMPL-help.html](https://neos-server.org/neos/solvers/lp:CPLEX/AMPL-help.html))

CPLEX

(<http://www.ibm.com/software/commerce/optimization/cplex-optimizer>)

The NEOS Server offers the IBM ILOG CPLEX Optimizer (<http://www-01.ibm.com/software/commerce/optimization/cplex-optimizer/>) for the solution of linear programming (LP), mixed-integer linear programming (MILP), and second-order conic programming (SOCP) problems. Acceptable input formats for CPLEX on the NEOS server include AMPL, GAMS, LP, MPS, and NL formats.

Details on CPLEX can be found on the IBM CPLEX (<http://www-01.ibm.com/software/commerce/optimization/cplex-optimizer/>) website. Additional information on all IBM software available to academics can be found on the IBM Academic Resources (<https://developer.ibm.com/academic/>) webpage.

Using the NEOS Server for CPLEX/AMPL

The user must submit a model in AMPL (<http://www.ampl.com/>) format. Examples are provided in the examples section of the AMPL website (<http://ampl.com/resources/the-ampl-book/example-files/>).

The problem must be specified in a model file. A data file and commands files may also be provided. If the commands file is specified, it must contain the AMPL `solve` command; however, it must not contain the `model` or `data` commands. The model and data files are renamed internally by NEOS.

The commands file may include option settings for the solver. To specify solver options, add

```
option cplex_options 'OPTIONS';
```

where OPTIONS is a list of one or more of the available solver options (<http://ampl.com/products/solvers/solvers-we-sell/>) for AMPL.

Note: An email address is required for any submissions that use CPLEX. This email address will be forwarded to IBM and may be used by IBM for promotional purposes. When using the XML-RPC interface, you must add the following line into the XML file that is sent to NEOS:

```
<email>your.address@email.edu</email>
```

Web Submission Form

Model File

Enter the location of the AMPL model file (local file)

tested_ok_64..._testing.mod

Data File

Enter the location of the AMPL data file (local file)

tested_ok_64n..._ir_0.15.dat

Commands File

Enter the location of the AMPL commands file (local file)

tested_ok_64...egular_A.run

Comments

Additional Settings

- ☐ Dry run: generate job XML instead of submitting it to NEOS
- ☒ Short Priority: submit to higher priority queue with maximum CPU time of 5 minutes

E-Mail address:

Please do not click the 'Submit to NEOS' button more than once.

Submit to NEOS

Clear this Form

By submitting a job, you have accepted the Terms of Use (<https://neos-server.org/neos/termofuse.html>)

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