Chalmers University of Technology
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Mathematical Sciences
Optimization
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MVE165
MMG630
Applied Optimization
Exercise information

March 23, 2009

Complement to Exercise 1: Linear programming and software

Use Cplex from Matlab—new feature now working

It is now possible to call Cplex from within matlab, following the instructions below.

For bash users, type in a Linux command window:

```
> export ILOG_LICENSE_FILE=/chalmers/sw/sup/cplex-11.1/ilm/access.ilm
```

For tcsh users, type in a Linux command window:

```
> setenv ILOG_LICENSE_FILE /chalmers/sw/sup/cplex-11.1/ilm/access.ilm
```

Then start Matlab and add a path to the cplexmex:

```
> matlab &
```

```
>> addpath /chalmers/sw/unsup/cplexmex/dist
>> help cplexmex
>> help cplexmexparams
```

Then, define an optimization problem, e.g.,

```
sense =1;
H = [];
F = [-1 -2 -3];
A= [1 1 1;10 4 5;2 2 6];
B=[100 600 300]';
ctype=['L', 'L', 'L']';
lb = [0 0 0]';
ub = [inf inf inf]';
vartype = ['C', 'C', 'C']';
params.msglvl = 1;
params.solver = 0;
[xopt,opt,status,extra]=cplexmex(sense,H,F,A,B,ctype,lb,ub,vartype,[],params)
```