Matlab Knitro module on HPC Prince Cluster

[wang@c17-04 ~]$ module load knitro/10.2.1
[wang@c17-04 ~]$ matlab -nodisplay -r "[x fval] = knitrolink(@(x)cos(x),1); exit"

MATLAB (R)  
Copyright 1984-2016 The MathWorks, Inc.  
R2016b (9.1.0.441655) 64-bit (glnxa64)  
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To get started, type one of these: helpwin, helpdesk, or demo.  
For product information, visit www.mathworks.com.

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Artelys Knitro 10.2.1  
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Knitro presolve eliminated 0 variables and 0 constraints.

algorithm: 1  
gradopt: 4  
hessopt: 2  
honorbnds: 1  
outlev: 1  
par_concurrent_evals: 0

The problem is identified as unconstrained.
Knitro changing bar_initpt from AUTO to 3.
Knitro changing bar_murule from AUTO to 4.
Knitro changing bar_penaltycons from AUTO to 1.
Knitro changing bar_penaltyrule from AUTO to 2.
Knitro changing bar_switchrule from AUTO to 1.
Knitro changing linesearch from AUTO to 1.
Knitro changing linsolver from AUTO to 2.

Problem Characteristics ( Presolved)

Objective goal: Minimize
Number of variables: 1 (1)
  bounded below: 0 (0)
  bounded above: 0 (0)
  bounded below and above: 0 (0)
  fixed: 0 (0)
  free: 1 (1)
Number of constraints: 0 (0)
  linear equalities: 0 (0)
  nonlinear equalities: 0 (0)
  linear inequalities: 0 (0)
  nonlinear inequalities: 0 (0)
range: 0 (0)
Number of nonzeros in Jacobian: 0 (0)
Number of nonzeros in Hessian: 1 (1)

EXIT: Locally optimal solution found.

Final Statistics

Final objective value = -1.00000000000000e+00
Final feasibility error (abs / rel) = 0.00e+00 / 0.00e+00
Final optimality error (abs / rel) = 2.37e-09 / 2.37e-09
# of iterations = 6
# of CG iterations = 0
# of function evaluations = 15
# of gradient evaluations = 0
Total program time (secs) = 0.13025 (0.128 CPU time)
Time spent in evaluations (secs) = 0.06239

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Step-by-step guide

Related articles

- **Clusters - Prince**
- **Matlab Knitro module on HPC Prince Cluster**
- **Access to Google Drive from Prince Cluster**
- **Is the Million Song Dataset available on the NYU HPC Prince cluster?**