A Quick Start for The Python Interface to LINDO API

July 15, 2018

1 Introduction

The package *pyLindo* is a Python interface to LINDO API C functions. It supports Linear, Integer, Quadratic, Conic, General Nonlinear, Global, and Stochastic models.

2 Installation

To install the package, it requires the installation of LINDO API 12.0 as well. See file INSTALL for details of the installation and platform specifications.

The package also uses numpy for scientific computing with Python integrating C/C++ code. Hence, to install the package users must also need to install numpy. For details, please see http://www.numpy.org/.

3 Usage

The Python interface function names use the convention of 'py' + name of LINDO API function, e.g. *pyLScreateEnv* in the Python interface corresponds to *LScreateEnv* in LINDO API. All LINDO parameters and constants are the same with LINDO API. The file */example/lp.py* provides an example on how to use the pyLindo package in general.

4 General commands

To load the package, use sentence:
*from pyLindo import **

To generate a LINDO API environment object, use sentences:
LicenseKey = N.array(",dtype='S1024')
lindo.pyLSloadLicenseString('c:/lindoapi/license/lndapi120.lic',LicenseKey)
pnErrorCode = N.array([-1],dtype=N.int32)
pEnv = lindo.pyLScreateEnv(pnErrorCode,LicenseKey)

To generate a LINDO API model object, use sentence:
pModel = lindo.pyLScreateModel(pEnv,pnErrorCode)