IBM® Decision Optimization CPLEX® Modeling for Python

Welcome to IBM® Decision Optimization CPLEX® Modeling for Python.

With this library, you can quickly and easily add the power of optimization to your application. You can model your problems by using the Python API and solve them on the cloud with the IBM Decision Optimization on Cloud service or on your computer with IBM ILOG® CPLEX Optimization Studio.

This library is composed of 2 modules:

- Mathematical Programming Modeling for Python using docplex.mp (DOcplex.MP)

- Constraint Programming Modeling for Python using docplex.cp (DOcplex.CP)

IBM® Decision Optimization CPLEX® Modeling for Python — IBM® Decision Optimization CPLEX® Modeling for Python (DOcplex) V2.20 documentation

Setup the Environment: Handling infeasible models with Docplex¶

This tutorial includes everything you need to set up Decision Optimization engines, build a mathematical programming model, then use the progress listeners to monitor progress, capture intermediate solutions and stop the solve on your own criteria.
When you finish this tutorial, you'll have a foundational knowledge of *Prescriptive Analytics*.
docplex-examples/infeasible.ipynb at master · IBMDecisionOptimization/docplex-examples (github.com)

Project Example: Finding optimal locations of new stores

This tutorial includes everything you need to set up IBM Decision Optimization CPLEX Modeling for Python (DOcplex), build a Mathematical Programming model, and get its solution by solving the model on the cloud with IBM ILOG CPLEX Optimizer.
When you finish this tutorial, you'll have a foundational knowledge of *Prescriptive Analytics*.
This notebook is part of Prescriptive Analytics for Python

docplex-examples/chicago_coffee_shops.ipynb at master · IBMDecisionOptimization/docplex-examples (github.com)