

DynLP essentially solves problems of the following form:

Maximize $S = CX'$

Subject to $AX' \leq B$

(or other variants of this), where:

- S denotes the “solution”
- C is a row vector of “weights”
- X is a row vector of “variables”
- A is a matrix
- B is a column vector

The matrix A and the vector B together defines the constraints of the problem. The goal is to determine the optimizing vector, X, and the corresponding solution value S.

By using DynLP events you can access all the elements of the LP problem. When specifying which element an event should be linked to, you use the “names” listed above, i.e., “S”, “C”, “X”, “A”, and “B”. To simplify the user interface, these are all considered to be “tables”. You access a specific element in a table by specifying the row and the column numbers of this element. For the row vectors “C” and “X”, the row number should always be 1. Similarly, for the column vector “B”, the column number should always be 1. Finally for the scalar “S”, both the row and the column numbers should be 1.