The first part of the presentation is an overview of ILOG CPLEX algorithms and parameters for solving linear, mixed integer, quadratic and mixed integer quadratic programs. Also, CPLEX includes the ILOG CPLEX Callable Library (C and VB APIs) and ILOG Concert Technology (C++, Java and .Net APIs) to make it easy to embed the powerful CPLEX algorithms in your application. The second part of the presentation will highlight the recent algorithmic advances in Mathematical programming and the features that made CPLEX the industry standard.