Title:

MINLP with Combined Interior Point and Active Set Methods

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Abstract: The APOPT and BPOPT solvers combine the active set and interior point methods to improve the speed and convergence of subproblems in the branch and bound approach to Mixed Integer Nonlinear Programming (MINLP). The strength of an active set method is in quickly finding solutions from nearby branches while the strength of an interior point method is in problems with many degrees of freedom or where the active set is not known. Details of integration at the LP/QP and NLP levels are provided.

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