

Desing of Survivable Networks : A Survey

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Abstract

For the past few decades, combinatorial optimization techniques have been shown to be powerful tools for formulating and solving optimization problems arising from practical situations. In particular, many network design problems have been formulated as combinatorial optimization problems. With the advances of optical technologies and the explosive growth of the Internet, telecommunication networks have seen an important evolution and therefore, designing survivable networks has become a major objective for telecommunication operators. Over the past years, a big amount of research has then been done for devising efficient methods for survivable network models, and particularly cutting plane based algorithms. In this paper, we attempt to survey some of these models and the optimization methods used for solving them.