Modelling of computer network reliability

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We investigated reliability of the computer networks which structures are well mapped in the form of the casual count of network type.

Probability estimation problem of a random graph connectivity by means of modelling of computer networks reliability is considered. Possibilities of controlling reliability and quality of computer networks were studied. A probability of connectivity of two chosen knots of the network or one of the network knots with all the remaining ones is investigated. The upper and lower boundaries for measures of the most reliable communication network are defined.

Keywords: computer network, reliability modelling, criterion of reliability, connectivity, random graph, dividing set.

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