星狀圖二可生成性質相鄰點容錯之研究

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ABSTRACT

The star graph is a famous interconnection networks. Let Sn = (V0 ∪ V1, E) be the n-dimensional star graph. Let P be a path and V(P) be the set of vertices on P. Two paths P1 and P2 are two spanning disjoint paths of Sn = (V0 ∪ V1, E) if V(P1) ∩ V(P2) = ? and V(P1)∪ V(P2) = V0 ∪ V1. Let Fav be the set of fav pairs of adjacent vertices and Fe be the set of fe faulty edges of Sn. In this thesis, we will show that for any s1, s2 ?kV0 and t1, t2 ?k V1, there exist two spanning disjoint paths P(s1, t1) and P(s2, t2) of Sn - Fav – Fe for fav + fe ? n-4 and n ? 5.

Keywords : star graph、spanning disjoint paths、edges fault tolerance、adjacent vertices fault tolerance

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