

5 A METHOD OF IMPLEMENTING AN ACYCLIC DIRECTED GRAPH
 STRUCTURE USING A RELATIONAL DATABASE

Abstract

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A method for implementing an acyclic directed graph structure using a computer relational database system, and a data structure corresponding thereto. An advantageous relational database structure representing the acyclic diagraph can be
15 obtained by creating three table structures storing relationships between nodes in the diagraph and other properties. A node table stores relationships between each node in the diagraph and properties assigned to the nodes. An edge table stores indications of nodes which are directly linked and the direction of the link. A path table stores indications of nodes which are directly or indirectly linked and the direction of those
20 paths. Procedures for maintaining the database structure in a consistent manner are also described.

FIG. 1