

Abstract

Mohamed H. Mourad

Interoperability as a Key Enabler for Manufacturing in the Cloud

The emerging cloud paradigm has a prominent effect on manufacturing. The move from hardware bound systems to requirements based service provision is enabling the transition to cloud manufacturing. A networked manufacturing service provision system requires vast amounts of information to be exchanged in a non-ambiguous and timely manner to meet production requirements. In this paper, interoperability is identified as a key enabler for cloud manufacturing and a framework for realisation of interoperability across heterogeneous computer aided manufacturing systems is proposed. Using this framework, manufacturing resources can be shared by a large number of clients based on requirements and priorities.